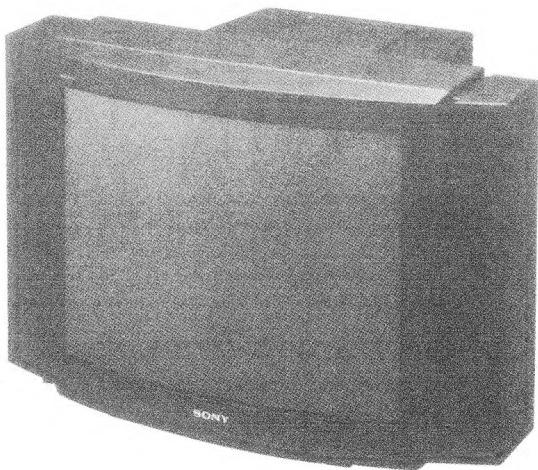


KV-E2521D/E2921D

RM-817

SERVICE MANUAL



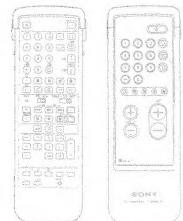
AEP Model

KV-E2521D

Chassis No. SCC-E18A-A

KV-E2921D

Chassis No. SCC-E18B-A



AE-1C CHASSIS

MODELS OF THE SAME SERIES	
KV-E2521D/E2921D	

SPECIFICATIONS

【KV-E2521D/E2921D】

Television system
Color system
Stereo system
Channel coverage

Picture tube

Inputs

Outputs

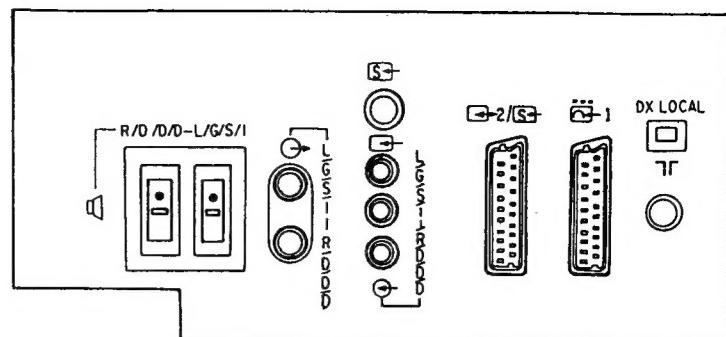
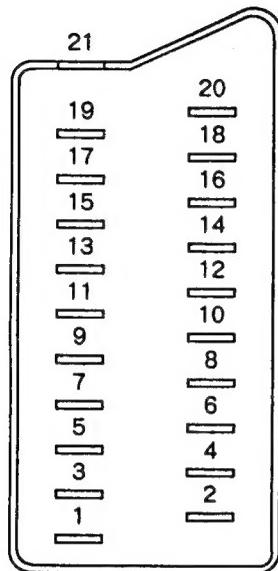
B/G/H
PAL, SECAM, NTSC3.58, NTSC4.43
GERMAN stereo
VHF: E2-E12 UHF: E21-E69
CABLE TV : S1-S41
Black Trinitron tube
Approx. 63.5 cm (25 inches)
(Approx. 59 cm picture measured diagonally)
110 ° -degree deflection
Approx. 72.4 cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110 ° -degree deflection
④ 1 21-pin connector:
 CENELEC standard including RGB input.
④ 2 21-pin connector:
 including S video input
④ 3 Audio and video input jacks: phono jack.
Y: 1Vp-p±3dB 75ohm
C: 0.3Vp-p±3dB 75ohm
21-pin connector: CENELEC standard
Headphones jack: stereo minijack
External speaker terminals: 2-pin DIN
Audio output jacks: phono jack (output dependent upon TV settings)

Sound output	30 W + 30 W
Power consumption	100 Wh (KV-E2521D) 114 Wh (KV-E2921D)
Dimensions incl.speakers	Approx. 757x493x468 mm (w/h/d) (KV-E2521D) Approx. 838x554x517 mm (w/h/d) (KV-E2921D)
Weight incl.speakers	Approx. 41.0kg (KV-E2521D) Approx. 55.0kg (KV-E2921D)
【RM-817】	
Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx. 75×221×23mm(w/h/d)
Weight	Approx. 194g including batters
Accessories supplied	IEC designation R6 Commander
Supplied accessories	RM-817 Remote Commander (1) IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.

TRINITRON® COLOR TV
SONY®

21 pin connector (◎-1, ◎-2)



Pin No	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
2	○	○	Audio input B (right)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
3	○	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
7	○	●	Blue input	0.7V±3dB, 75ohms, positive
8	○	○	Function select (AV control)	High state (9.5-12 V) : Part mode Low state (0-2 V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal : 0.7V±3dB, 75ohms, positive
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	-	Red input	0.7V±3dB, 75ohms, positive
	-	○	(S signal) croma input	0.3V±3dB, 75ohms, positive
16	○	●	Blanking input (Y _s signal)	High state (1-3 V) Low state (0-0.4 V) Input impedance : 75ohms
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
20	○	-	Video input	1V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
	-	○	Video input/Y (S signal)	1V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
21	○	○	Common ground (plug, shield)	

○ connected

● unconnected (open)

* at 20 Hz-20 kHz

4 pin connector (◎)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V±3dB 75ohm, positive Sync 0.3V ₋₃ ⁺¹⁰ dB
4	C (S signal) input	0.3V± 3dB 75ohm positive

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK
⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED
VIEWS AND IN THE PARTS LIST ARE CRITICAL TO
SAFE OPERATION. REPLACE THESE COMPONENTS
WITH SONY PARTS WHOSE PART NUMBERS APPEAR
AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY.

SECTION 1 GENERAL

- Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

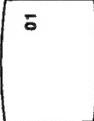
TV channel presetting

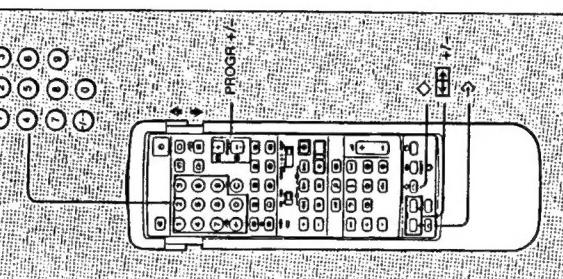
After installing the TV set, TV channels must be preset.

TV broadcasting stations broadcast their programmes on certain fixed frequencies (channels). In order to receive these programmes it is necessary to search for the relevant broadcasting station and to set record it as a channel. The "programme number" is the number that the user decides to associate with a certain channel.

For channel settings there are 60 positions available in the memory. In this way all stations broadcasting within the user's country can be received and recorded as a channel.

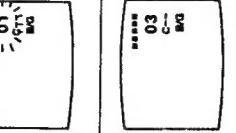
Turning the TV unit ON and OFF

Operation	Result
1 Press  on the TV set.	The TV set will come on. Note: If no picture appears on the screen, the TV set is in the stand-by mode. In this case follow instructions given in step 2.
2 Press  or one of the selection numbers of the remote control unit.	A programme number appears on the screen. 
Temporarily turning off the TV set: Press  on the remote control unit.	The TV set will enter the stand-by mode. It can be turned on again by pressing the  button, or the selection button of the remote control unit.
Turning off the TV set definitively: Press  on the TV set.	The TV set will be turned off.



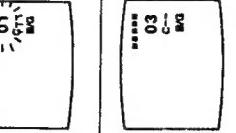
TV channels automatic presetting

If the numbers to be associated with certain TV channels are already known, the following explanation can be skipped. In this case go directly to the section "TV channels direct selection".

Operation	Result
1 Press  to begin the preselection.	 The programme number flashes.
2 Press PROGR +/- buttons of the remote control unit to select the channel number of the broadcasting station you want to memorize.	 The programme number on the screen changes. NOTE: In case of a mistake, the "X" letter appears. Repeat once more the operation of step 2.
3 To search for broadcasting stations press  + and -.	 When a broadcasting station is tuned correctly, the search will stop. If you want to skip it, press  + or - again.
4 Press  to memorize the channel to that the broadcasting station is tuned.	 All data visualized under the channel number disappears from the screen.
5 To memorize other broadcasting stations repeat steps from 1 to 4.	

TV channels direct selection

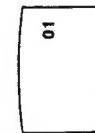
If the numbers to be associated with certain TV channels are already known, the following explanation can be skipped. In this case go directly to the section "TV channels automatic presetting".

1 Press  to begin the preselection.	 The programme number flashes.
2 Press PROGR +/- buttons of the remote control unit to select the channel number of the broadcasting station you want to memorize.	 The programme number on the screen changes. NOTE: In case of a mistake, the "X" letter appears. Repeat once more the operation of step 2.
3 To search for broadcasting stations press  + and -.	 When a broadcasting station is tuned correctly, the search will stop. If you want to skip it, press  + or - again.
4 Press  to memorize the channel to that the broadcasting station is tuned.	 All data visualized under the channel number disappears from the screen.
5 To memorize other broadcasting stations repeat steps from 1 to 4.	

NOTE When the "complete" side of the remote control unit is used check that the USE/MEM selector is in the USE position.

Direct TV channel setting

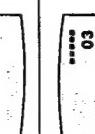
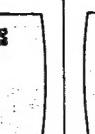
Direct presetting of TV channels is faster than automatic presetting. With this function any broadcasting station can be searched for and set as the desired channel.

Operation	Result
1 Press → to begin the presetting.	
2 Press the PROGR +/- buttons of the remote control unit to select the channel number under which you want to set the broadcasting station. Note To select a 2-figure number press /-- button. E.g. if you wish to select number 23, press /-- first, and then 2 and 3.	 The programme number on the screen changes. Note In case of mistake, the "X" letter appears on the screen. Repeat once more the operation of step 2.
3 Press C. If you wish to select a cable station press C twice.	
4 By using the number buttons of the remote control unit select the channel number always with two figures (for "4" press "04").	
Note: Press → to memorize the channel to which the station is tuned.	
5 Press → to memorize the channel to which the station is tuned.	

To memorize other broadcasting stations repeat the above procedure.

Exclusion of programmes

Once all desired stations have been memorized, unoccupied channel numbers, with stations of inferior quality signals can be excluded. The undesired channels can be excluded by using the PROGR + and - buttons.

Operation	Result
1 Press → to begin presetting.	
2 By acting on the PROGR + and - buttons, or on the number keys of the remote control unit, select the programme number you wish to exclude.	
3 Press Coo.	
4 Press ↓.	

Note
Undesired channels can be excluded only by using PROGR + and - keys.
Excluded programme numbers appear on the screen if you press the number keys of the remote control unit.

Use of additional tuning functions

Temporary channel tuning
It is possible to temporarily memorize a channel, even if it has not been preset.

Operation	Result
1 Press C. Press C twice for a cable station.	"C" "S" for cable stations) indication appears on the screen.
2 Using the number keys of the remote control unit select the channel number, always with two figures (e.g., "04" for channel "4").	The channel will be received, but it will not be set as a programme number.

Basic functions

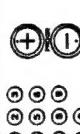
Special functions

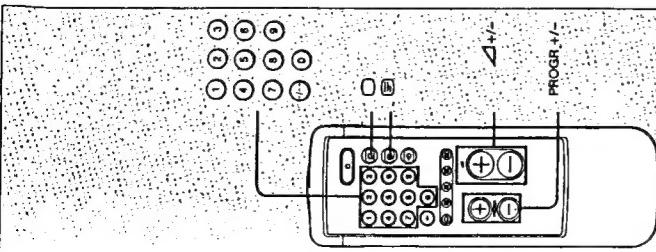
This section of the manual explains the use of the two fundamental functions of the TV set, selection of TV programmes and volume control.

I see the "simple" side of the remote control unit

Programme selection

BOSTON AND BOSTONIAN 11

Operation	Result
1 Turn the TV set on. 	The selected programme number appears on the screen.
2 Press PROGR +/- buttons or the number keys of the remote control unit. To select a 2-figure number press '-' button. E.g., if you wish to select number 23, press '-' first, and then 2 and 3. 	 23



Volume control

Operation	Result
Press \triangle + or -	The volume indication appears on the screen. 

Use of additional functions

Use of other functions with the TV set buttons

It is also possible to select programmes and to adjust the volume by using \rightarrow , \leftarrow , \uparrow and \downarrow buttons, located on the front panel of the TV set.

In this case, press first $P \rightarrow$, until the indication P (channel) or Δ (volume) appears on the screen, and then press \rightarrow , \leftarrow , \uparrow or \downarrow buttons.

Use of teletext service

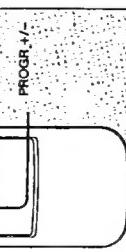
Press **Q**. To revert to the TV mode, press **O**. For further information on the teletext service see pag. 8.

The diagram illustrates the connection between a monitor and a control panel. On the left, a rectangular monitor is shown with a cable extending from its side. This cable is labeled 'A/B' at the point where it connects to the control panel on the right. The control panel is a complex unit featuring a central digital display, numerous small circular buttons arranged in a grid, and several larger, distinct buttons labeled 'A/B', 'P', and 'S'. Above the display, there are additional controls including a double-headed arrow, a circle with a dot, and a square.

Before selecting programmes make sure that TV channels have been monitored

卷之三

<p>1</p> <p>Turn the TV set on.</p> 	<p>Press PROGR + / - buttons or the number keys of the remote control unit. To select a 2-figure number press +/- button. E.g., if you wish to select number 23, press +/- first, and then 2 and 3.</p>
<p>2</p>	<p>The selected programme number appears on the screen.</p> 



Volume control

Operation	Result
Press \triangle + or -	The volume indication appears on the screen. 

Contrast

Brightness		Bright (\rightarrow) dark
Hue (for NTSC only)		More red \leftrightarrow more green
Picture definition		More definition \leftrightarrow less definition
Sound adjustment		
Adjustment	Symbol	Result ($+$ \leftrightarrow $-$)
Bass		More of low frequencies \leftrightarrow less of low frequencies
Treble		More of high frequencies \leftrightarrow less of high frequencies

Revision to the original adjustment
Press → ← ..

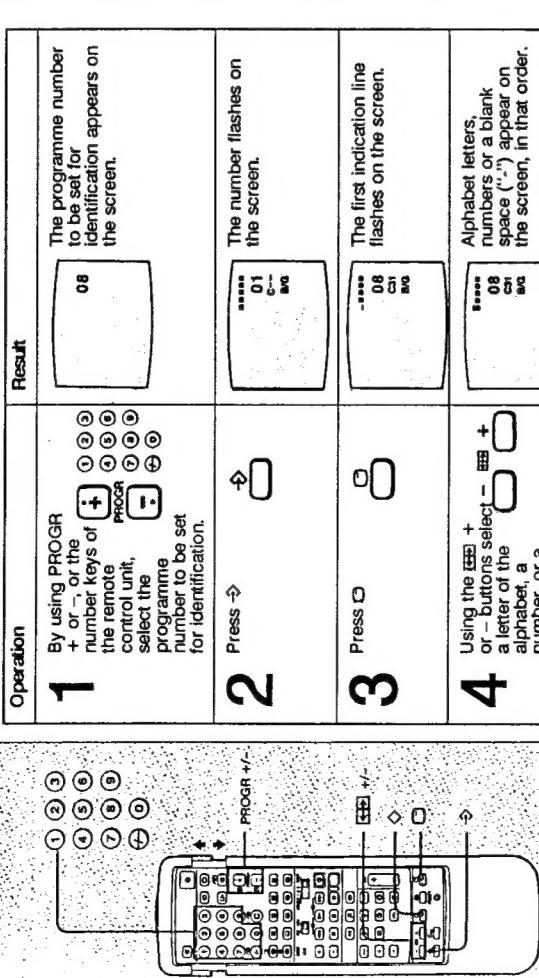
Use of the teletext service

Broadcasting station identification

By associating a name with a certain broadcasting station it is possible to avoid having to remember each time, in which channel number that particular station has been memorized.

Five different characters are available for station identification.

Operation	Result
1 By using PROG + or - or the number keys of the remote control unit, select the programme number to be set for identification.	The programme number to be set for identification appears on the screen.
2 Press □	The number flashes on the screen.
3 Press □	The first indication line flashes on the screen.
4 Using the PROG + or - buttons select - a letter of the alphabet, a number, or a blank space.	Alphabet letters, numbers or a blank space (":") appear on the screen, in that order.
5 Press □	In this way the first character has been set, and the following position now flashes on the screen.
6 Repeat steps 4 and 5, and fill all five available spaces.	
7 Press ◇.	All indications under the programme number disappear from the screen. All indications remaining on the screen have been memorized.



Through the teletext service a great deal of information can be received at any time. Broadcasting stations make this service available through TV broadcasts. To use the teletext service, use the green keys on the "complete" side of the remote control unit. When the "simple" side of the remote control unit is used, only the basic functions are available.

How to display teletext service

Operation	Result
1 Select the channel you want to watch.	The channel changes on the screen.
2 Press □	If there is no teletext signal, the indication "page 100" appears on the screen.
3 Use the number keys of the remote control unit to insert the three figures corresponding to the desired teletext page. Note In case of a mistake, press any three numbers, and then repeat the operation with the correct numbers.	The selected page appears on the screen. After a few seconds, the selected page appears on the screen.

Note: A weak TV signal may cause troubles in the use of teletext.

Use of special teletext functions

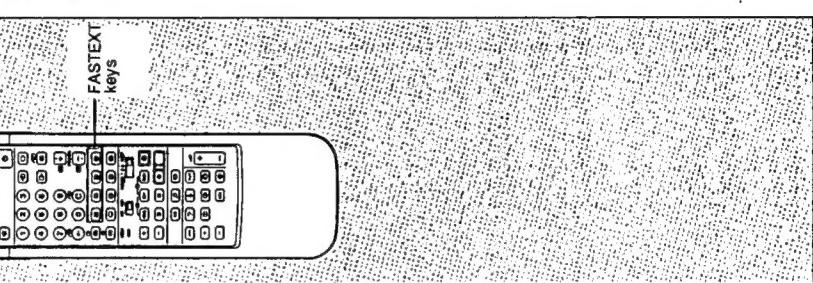
Required function	Operation	Result (on the screen)
Page index required.	Press □ (INDEX).	
Sub-pages required (page 888).	Press □	The sub-page appears (page 888).
Access to previous or following pages.	Press □ (PAGE +) or □ (PAGE -).	P201

Manual fine tuning

Operation	Result
Press PROG + or - repeatedly until the picture is at the optimum.	The indication → F ← appears on the screen.
Press □ to start preselection.	The programme number starts flashing on the screen.
Press ◇.	Manual fine tuning has been memorized.

Note: Manual fine tuning will be reset when the channel is selected again.

Use of the FASTEXT function	
Operation	Result
The FASTEXT function allows rapid access, at the touch of a single button, to the teletext functions. In the lower part of the screen, a colour coded index will be displayed when a FASTEXT teletext page is broadcasted. Each colour corresponds to the coloured keys on the remote control unit.	The selected teletext page appears on the screen.



Required function	Operation	Result (on the screen)
Superimposition of the teletext on the TV programme.	In the TV mode, press 2 twice. To revert to the normal teletext function press 2 again.	Teletext information will appear superimposed on the TV programme.
To prevent page changes due to page up-dating.	Press 2 (STILL). Press 2 (TXT/MIX) to revert to the normal function.	The 2 (STILL) symbol appears on the screen.
Magnification of teletext characters.	Press once to magnify the upper half of the screen. Press twice to magnify the lower half of the screen. Pressing the button three times the normal vision is restored.	The upper or the lower half of the page is magnified.
Display of hidden information (answers to quizzes, ecc.).	Press 2 (RIV). Press again to hide the answers.	The information is displayed.
Watching a programme while the teletext searches for the required page.	1. Ask again for the page. 2. Press 2 .	The number is displayed. TV programme is displayed.
	3. When the required page has been found, the page number will be displayed.	P201
	4. Press 2 to display the page.	The desired page will be displayed.
Display of a page at a preset time.	1. Request the page. 2. Press 2 (MEM.T).	The selected page will be displayed.
	3. Set the required time by using the number keys, and by inputting four figures (e.g. 0730 for '7:30').	In the lower part of the screen the indication '****' appears. The required time is displayed on the screen.
	To cancel the request Display the teletext page and then press 2 (CANC.M.).	To watch TV programmes until a preset time Press 2 (CANC). At the required time, the selected page appears in the upper part of the screen. Press 2 to display the page.

Note: Depending on the teletext service, certain functions may not be available.

Connections and optional functions

This TV set may be connected to other audio/video machines, such as videocameras, VTRs, videodisc players, or stereo systems.

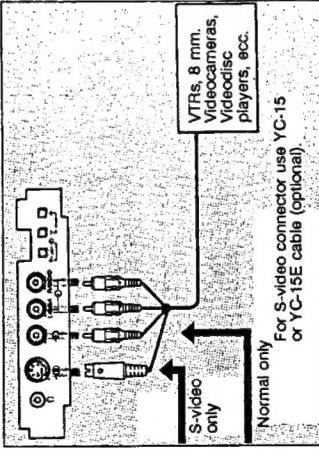
Connection to an external audio/video system

This TV set incorporates three groups of connectors, for input and output to the TV signal. Each group has the following characteristics.

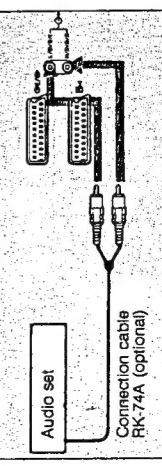
Connector	Input signal	Output signal
©-1	Normal audio/video signal or RGB signal	TV tuner audio/video signal
©-2 (©)	Normal audio/video signal and S-video signal	Audio/video signal from a selectable source
©-3, -© front panel	Normal audio/video signal and S-video	No signal

Connection of a TV set

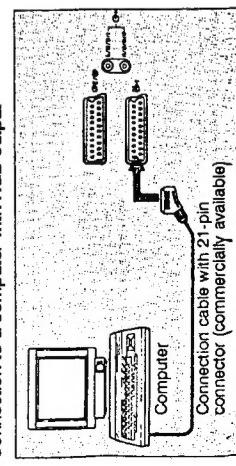
Temporary connection of video apparatus
For a temporary connection (e.g. of a videocamera) use the front panel terminals.



Connection of an audio unit



Connection to a computer with RGB output



Video programme playback

Using the input selector, pictures coming from a video taperecorder connected to the TV set's input, may be played back.

Operation

Select the desired video input by pressing © repeatedly.

Press © button to revert to TV mode.

Selectable inputs

Symbol

Selected input

The symbol of the selected input appears on the screen (see table hereunder).



Audio/video signal from ©-1 connector.

RGB signal from ©-1 connector.

Audio/video signal from ©-2 (©) connector.

S-video signal (from a VTR with S-video output) from ©-2 (©) connector.

Audio/video signal from ©-3 (4 pin) connector located on the front panel.

S-video signal from S-video ©-3 (4 pin) connector located on the front panel.

Input can be selected also with P-Δ-© buttons of the TV set.

In this case, first select ©, and then press the + / - buttons to select the desired input.

Selection of video output from a ©-2 (©) connector

The ©-2 (©) connector may output 4 video signals. Select the outgoing video signal in the following way.

Operation

Press © repeatedly to select the desired video input.

The selected video input symbol appears on the screen (see the table following).



Audio/video signal from ©-1 connector.

Audio/video signal from ©-2 (©) connector.

Audio/video signal from © and -© connectors.

Audio/video signal from T-type antenna connector T.

Use of the programmable remote control unit

This section explains the use of the remote control unit (supplied) for other audio/video apparatus.

The supplied remote control unit allows you to control Sony video units from a distance. The same remote control unit may be programmed to execute the same function also with other makers set.

Remote control on Sony video sets, without programming the supplied remote control unit
 Through the VIDEO 1/2/3, MDP selector button, video apparatus made by Sony (such as Betamax VTRs, 8 mm, VTRs, VHS VTRs and videodisc players) may be controlled from a distance.

1	Select position USE 
2	With the VIDEO 1/2/3/MDP selector button select the position corresponding to the Sony set you wish to control. Positions are as follows: VIDEO 1: Sony Betamax, or Betamax ED VTRs VIDEO 2: Sony 8 mm, VTRs VIDEO 3: Sony VHS VTRs MDP: Sony videodisc players
3	For remote control of video sets use buttons shown in the illustration.

Note:
 When the ● button is used, remember that this button has to be pressed together with the button on the right.

- If the VTR is being used has a COMMAND MODE selector, it is necessary to select, with this selector, the same position of the VIDEO 1/2/3, MDP selector of the supplied remote control unit.
- Buttons of the remote control unit correspond to functions not available on the VTR, cannot be activated.



1	Select the desired position with the VIDEO 1/2/3, MDP selector button. 
2	Select the position MEM with the mode selector. 
3	Put the remote control unit MEM with the mode selector. of the other set in front of the supplied remote control unit. about 5 cm
4	On the supplied remote control unit press the button corresponding to the function which has to be memorized. The MEM indication lights up. 
5	Press on the remote control unit the button corresponding to the function which has to be memorized. At the end of the memorization process the MEM indication goes off.
6	To memorize other functions repeat steps 3 to 5 of this procedure.
7	At the end of the procedure, select position USE for the supplied remote control unit. 

Note
 When the ● button is used, be sure to press it simultaneously with the button on the right side.

For efficient operation the two remote control units shall be positioned in the following way:

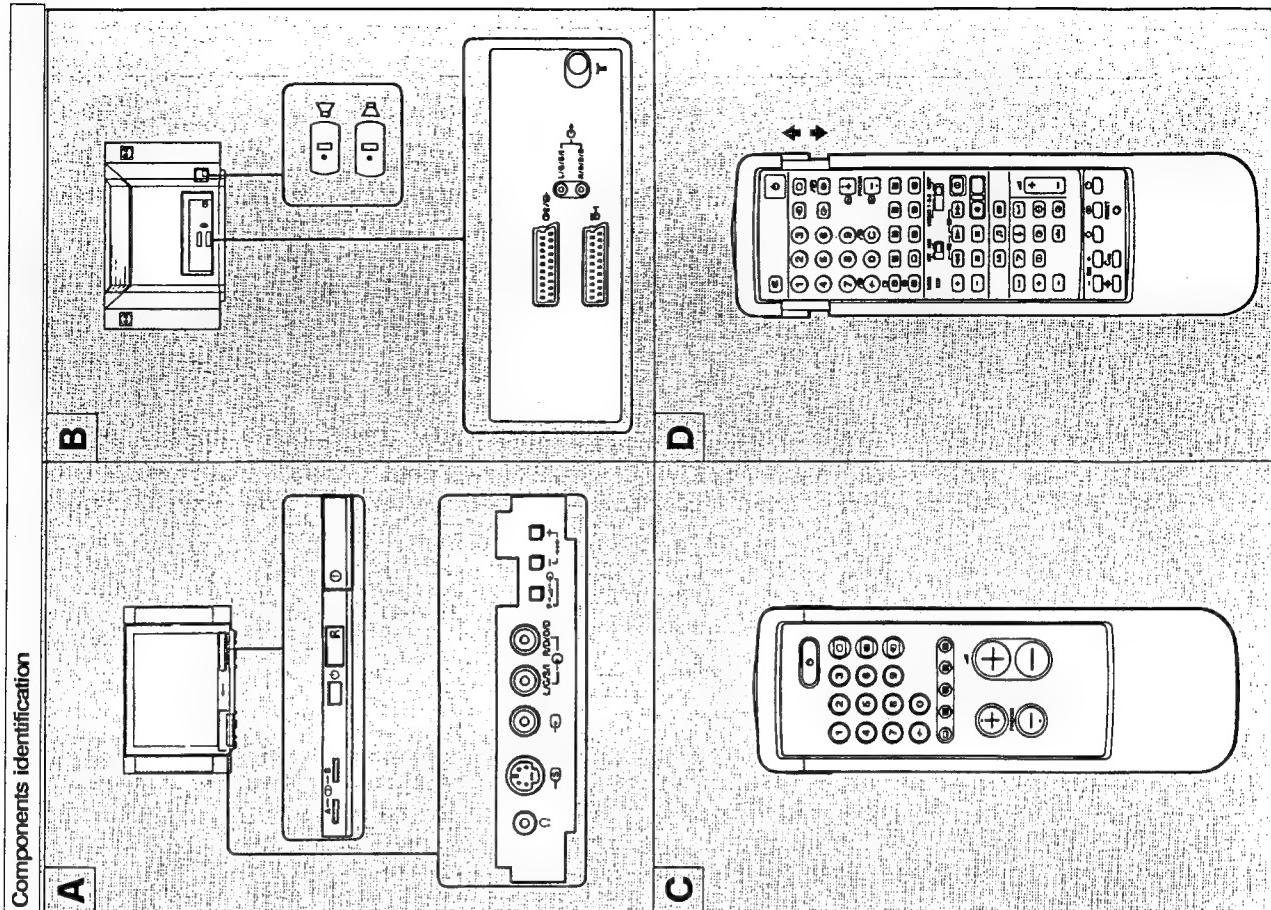
- one in front of the other.
- at an approximate distance of about 5 cm
- completely still during the memorizing operation.

In case of incomplete memorization
 Check that the video set exactly follows the memorized commands.
 After programming
 The MEM indicator will flash. Repeat the procedure starting from step 3.

After programming
 Check that the video set exactly follows the memorized commands.
 The previously memorized function will be replaced automatically.

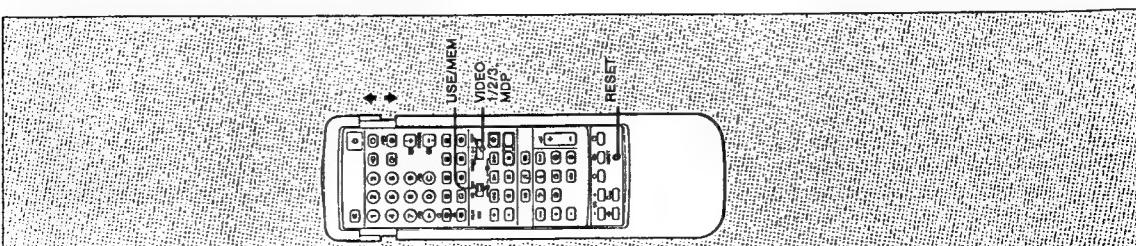
Note on programming
 Functions of non-Sony remote control units can be memorized only if these units make use of infrared signals. It may happen that certain particular functions of non-Sony remote control units cannot be memorized.

General information



Cancel of programmed functions	
1	With the VIDEO 1/2/3 / MDP selector, select the position corresponding to the functions that have to be cancelled.
2	Select MEM position on the mode selector.
3	Press the RESET button with the point of a pen, or similar.
4	Once the cancel process has been performed, select the USE position on the mode selector.

Note
 Instructions memorized in one single button cannot be cancelled.
 • After the programmed functions have been cancelled, functions for controlling Sony video apparatus are still available.



This section briefly describes controls of the TV set and the remote control unit, and their relevant functions.
For further details see the page shown on the right side of each description.

A TV set front panel	
Indication	Description
①	Power switch
②	Stand-by switch
A-C-D-B	Bilingual function indicators
③	Headphones connector (stereo mini-jack)
④	Input connectors (S-video/video/audio)
P→D→C	Function selector (programme/volume/input)
- e +	Function adjustment keys

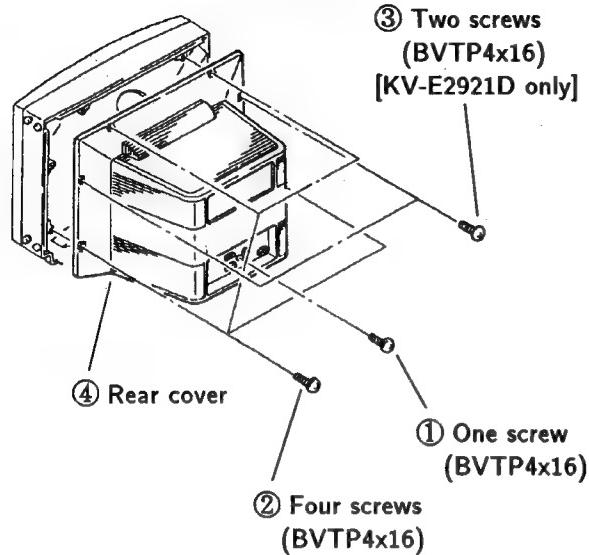
B TV set rear panel	
Indication	Description
⑤	Speaker connectors (upper: left speaker; lower: right speaker)
⑥	Connector 2, Euro AV (SCART, 21-pin), S-video in/video in/TV/video out signals.
⑦	Connector 1, Euro AV (SCART, 21-pin), RGB in/video in/TV/out signals.
⑧	Audio output connectors (RCA pin)
⑨	Antenna connector (of IEC standard)

C Remote control unit — simplified side	
Indication	Description
⑩	Input selector
⑪	Teletext service key
⑫	TV set power switch and TV mode selector
⑬	Standby key
1,2,3,4,5,6,7,8,9,0	Number keys
-/-	Channel selection key/2-figure programmes
Δ +/-	Volume adjustment keys
PROGR +/-	Programme selection key

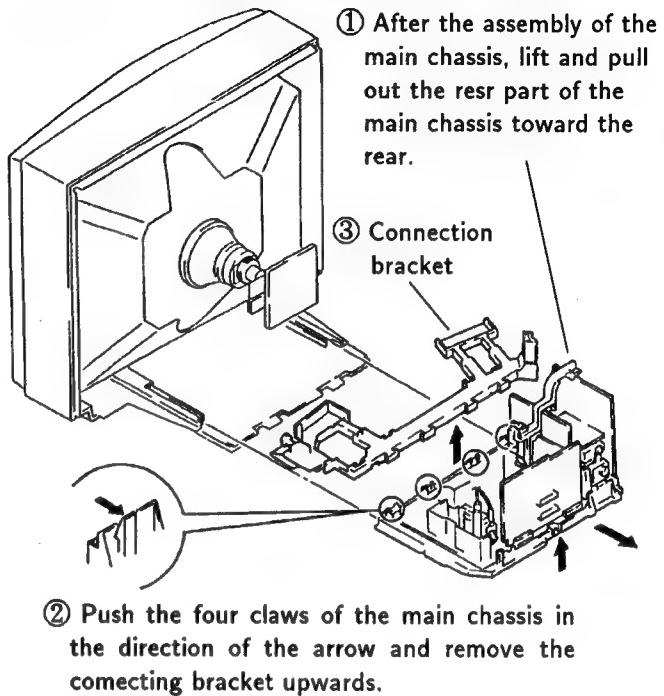
D Remote control unit — complete side	
Indication	Description
⑭	Sound muting key
⑮	Standby key
1,2,3,4,5,6,7,8,9,0	Number keys
⑯	Input selector
⑰	TV set power switch and TV mode selector
⑱	Output selector
⑲	Teletext key
⑳	Music programme key
Ⓐ/Ⓑ	Bilingual programmes language selection
-/-	Channel selection key/2-figure programmes
⑳	Channel direct selection key
⑳	Special sound effect key
⑳	Time display
⑳	Teletext operation keys
⑳	Display key
→•←	Reset key
Δ +/-	Volume adjustment keys
PROGR +/-	Programme selection keys
⑳	Image and audio adjustment keys
MEM	MEM light indication
USE/MEM	Normal/programme mode selector
VIDEO 1/2/3, MDP	Video unit selector
▲▼▶◀	Video units function key
○	Programme cancelling key
→	Channel presetting key
+ -	Channel tuning keys
◊	Channel storing keys
○	Broadcasting stations identification key
RESET	Cancel key

SECTION 2 DISASSEMBLY

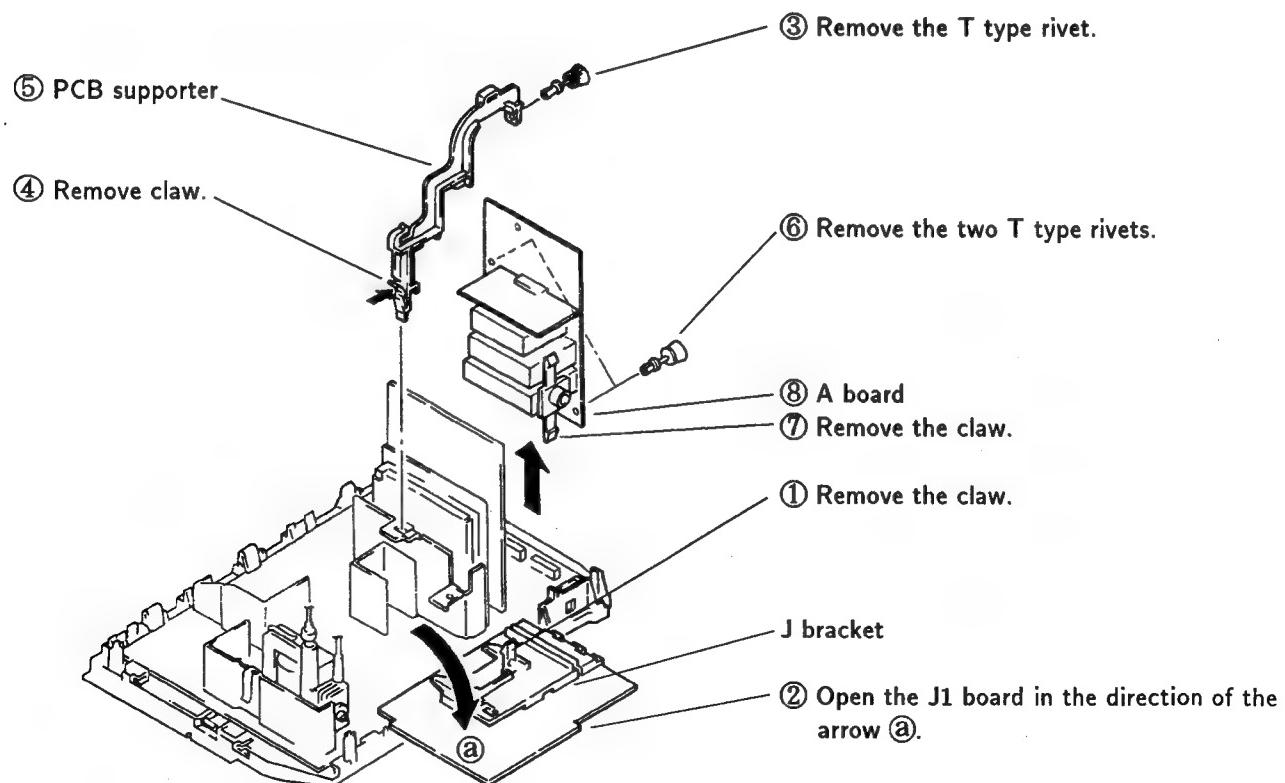
2-1. REAR COVER REMOVAL



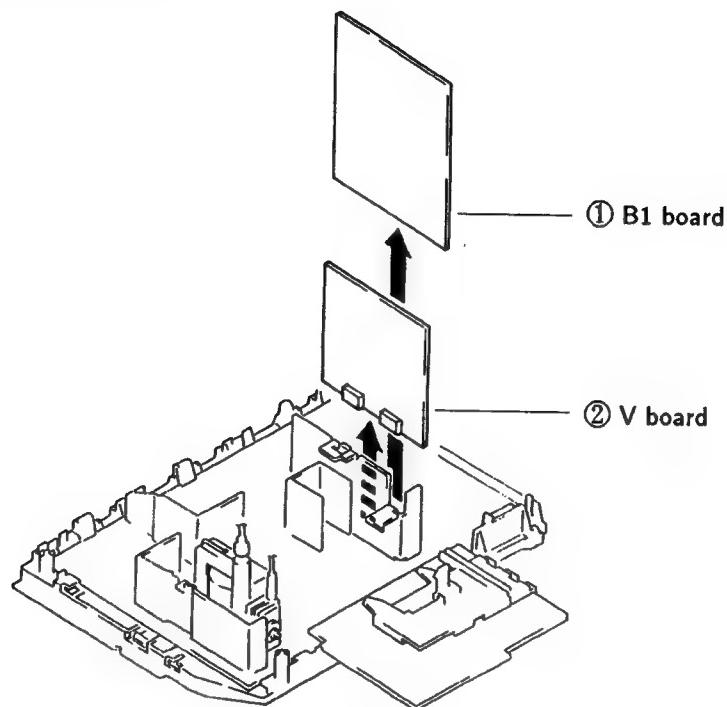
2-2. CHASSIS ASSEMBLY REMOVAL



2-3. A AND J1 BOARD REMOVAL

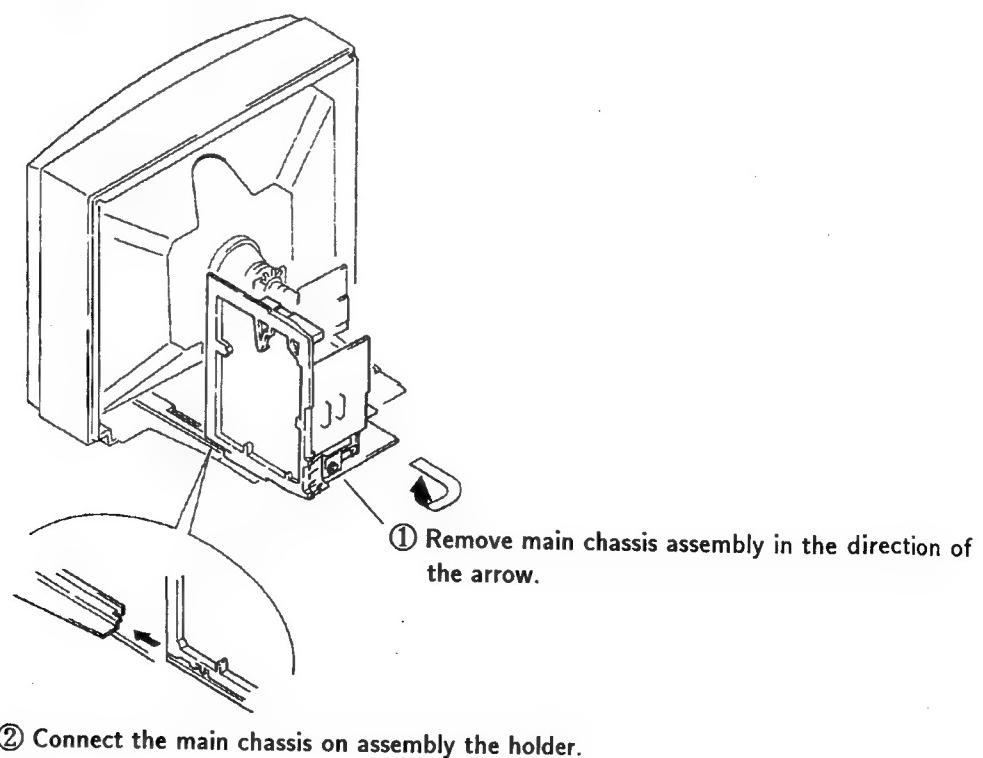


2-4. B1 AND V BOARDS REMOVAL



2-5. SERVICE POSITION

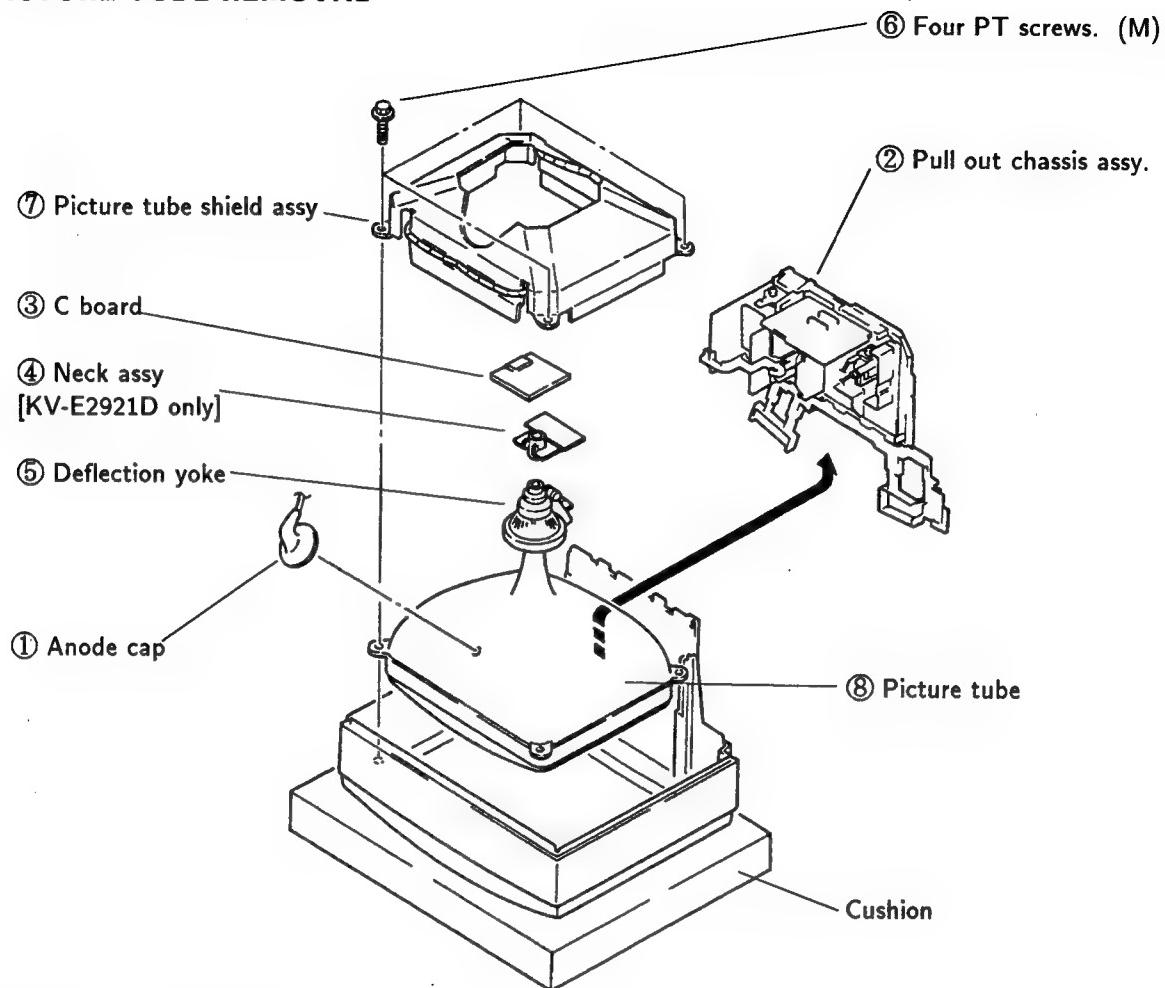
- * Remove the connector bracket from the main chassis assembly and then perform the following servicing.
(Refer to 2-2. CHASSIS ASSEMBLY REMOVAL.)



① Remove main chassis assembly in the direction of the arrow.

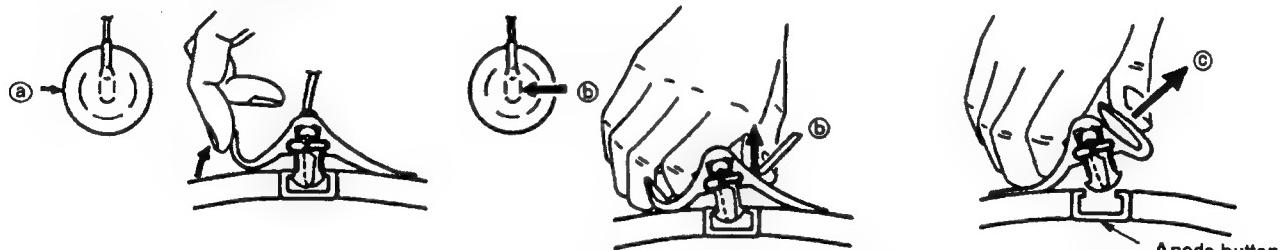
② Connect the main chassis on assembly the holder.

2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

• REMOVING PROCEDURES



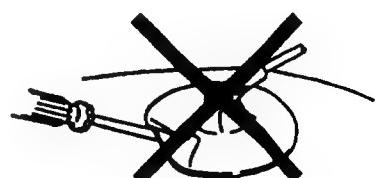
① Turn up one side of the rubber cap in the direction indicated by the arrow ②.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ③.

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ④.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there is specific instruction to the contrary, carry out these adjustments with the rated power supply.
- Unless there is specific instruction to the contrary, set the controls and switches this way :
 - Contrast 80%
 - (or remote control normal)
 - Brightness 50%

- Carry out the following adjustments in this order:
 - Beam landing
 - Convergence
 - Focus
 - White balance

Note : Testing equipment required

- Color bar/pattern generator
- Degausser
- DC power supply
- Digital multimeter
- Oscilloscope

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

- Input the white signal with the pattern generator.
Contrast |
Brightness | normal
- Position neck ass'y as shown in Fig 3-2.
- Set the pattern generator raster signal to red.
- Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
(See Figures 3-1 through 3-3.)
- Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
- Switch the raster signal to blue, then to green and verify the condition.
- When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-4.)

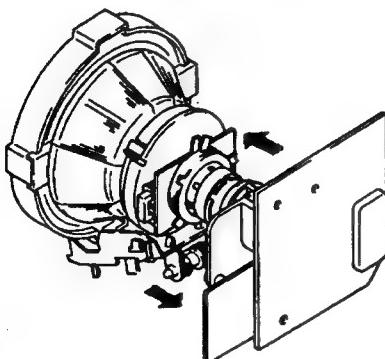


Fig. 3-1

Fig. 3-2

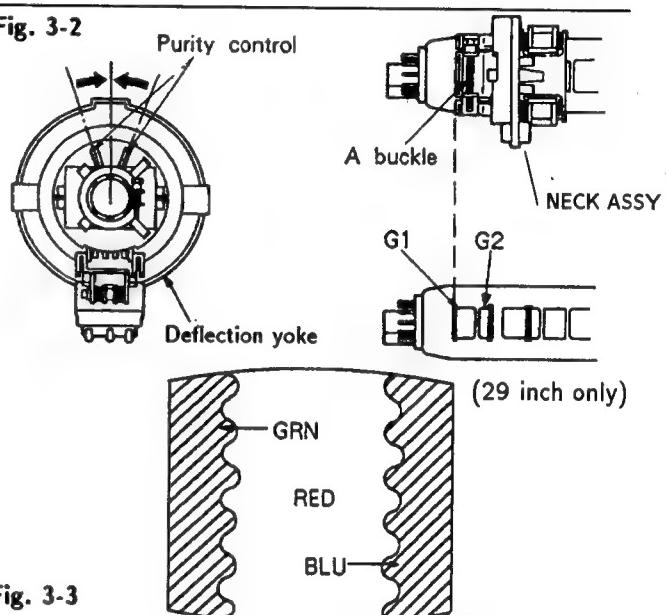


Fig. 3-3

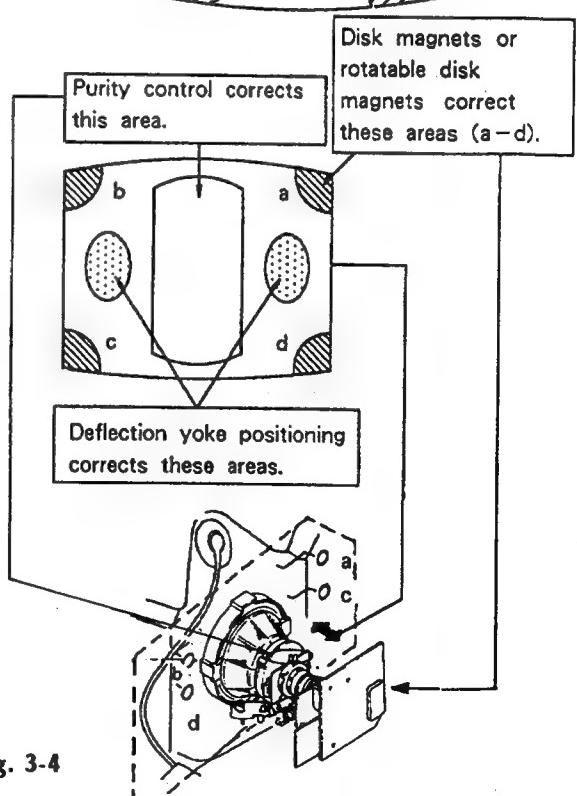


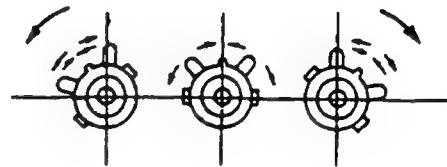
Fig. 3-4

3-2. CONVERGENCE

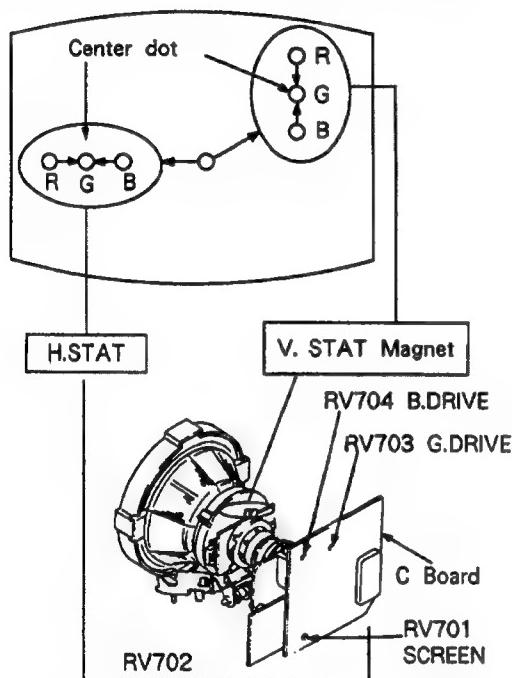
Preparations :

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

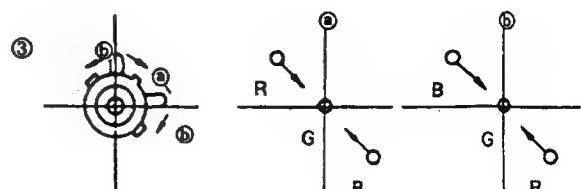
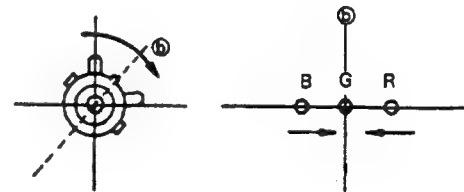
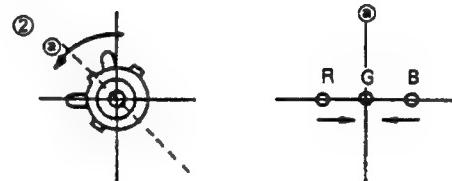
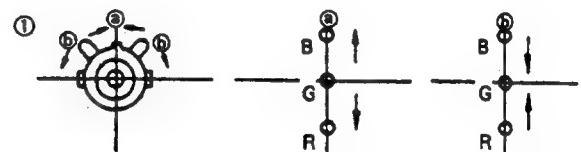


(1) Horizontal and vertical static convergence

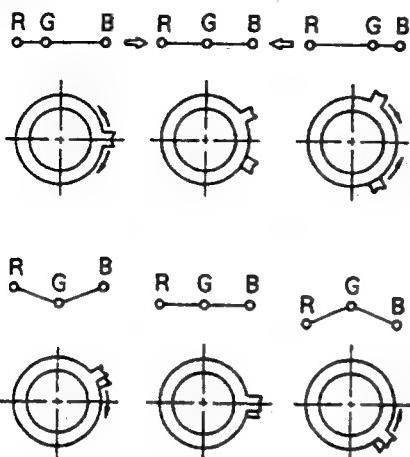


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

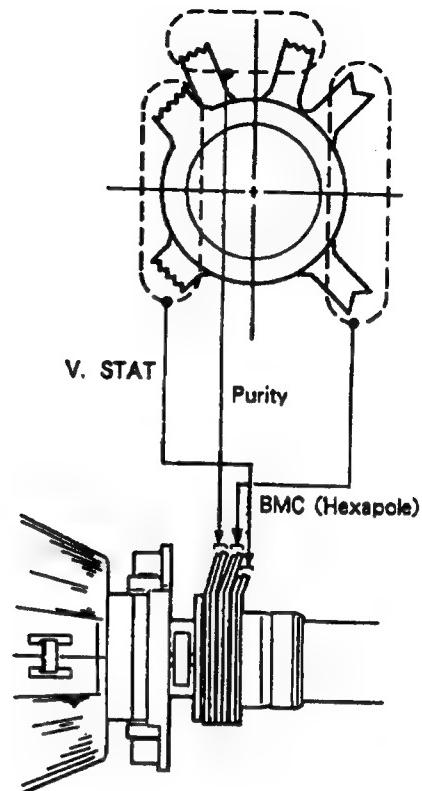
4. If the V.STAT magnet is moved in the direction of the ② and ③ arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



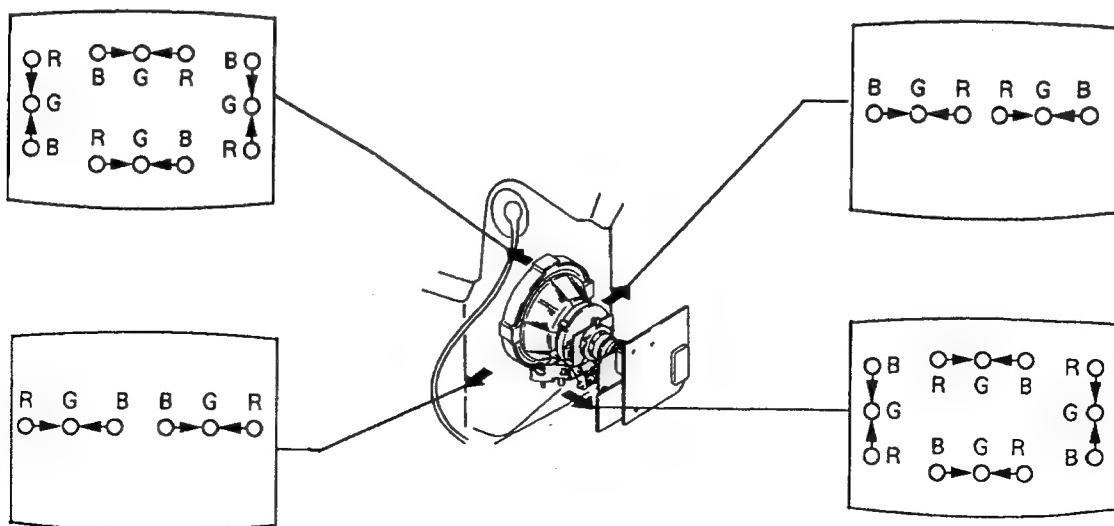
(2) Dynamic convergence adjustment

Preparations :

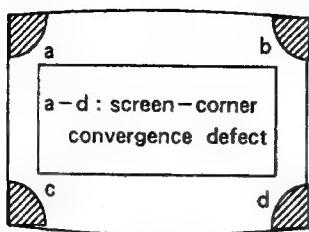
Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.

3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.

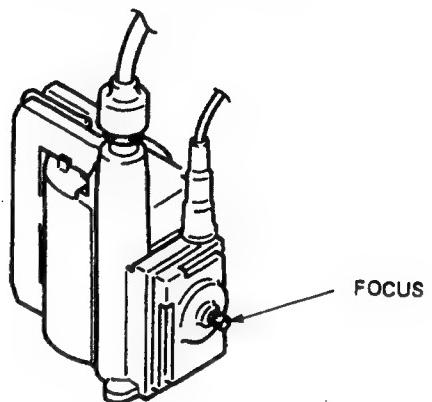


(3) Screen corner convergence

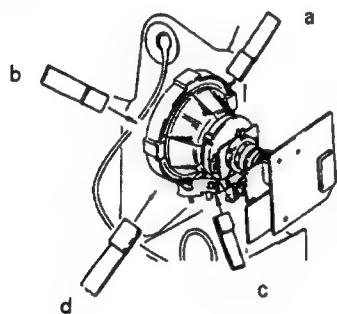


3-3. FOCUS

Adjust the focus to optimize the screen.



Install the permalloy assembly for the section with faulty.



3-4. WHITE BALANCE

[Screen G2 setting]

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 170V DC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

[White balance adjustment]

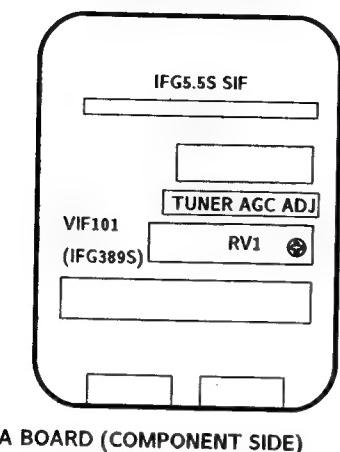
1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV704 (B Drive) and RV703 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

SECTION 4

CIRCUIT ADJUSTMENTS

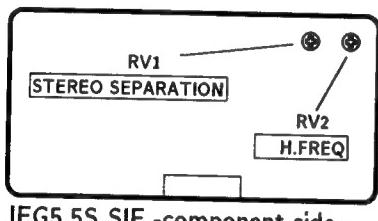
4-1. A BOARD ADJUSTMENTS



TUNER AGC ADJUSTMENT (VIF101, RV1)

1. Align with an appropriate signal between stations.
2. Adjust RV1 so that snow noise and cross modulation just disappear from the picture.

IFG5.5S SIF



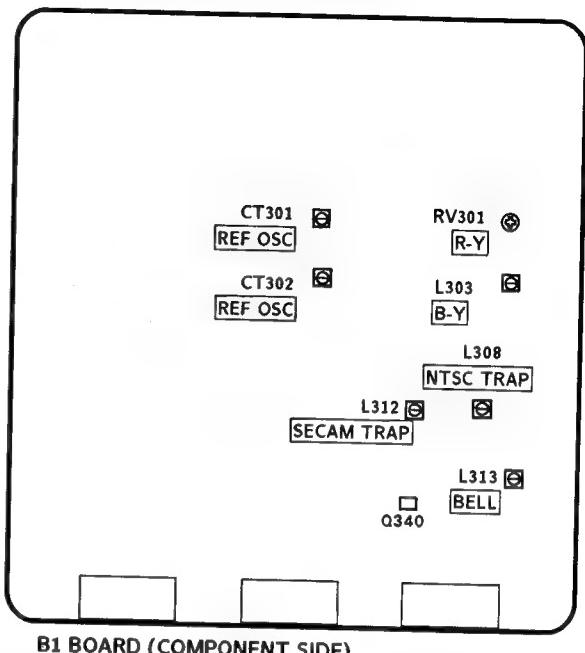
STEREO SEPALATION ADJUSTMENT (RV1)

1. Input a STEREO signals. (L-CH 400Hz, R-CH 1KHz)
2. Check the stereo indicator.
3. Connect on oscilloscope to pin⑧ (CH1) of CN1 through band pass filter of 1KHz
4. Adjust RV1 so that 1KHz voltage goes down to the minimum.

H FREQ (RV2)

1. Input a PAL color bar signal, then connect a jumper between pin⑫ IC4 and GND.
2. Connect a frequency counter to pin④ IFG5.5S (HP) of CN1 through a probe of 10 : 1.
3. Adjust RV2 (H.FREQ) $15.625 \pm 50\text{Hz}$.
4. After adjustment, remove the jamper.

4-2. B1 BOARD ADJUSTMENTS



REFERENCE OSCILLATOR ADJUSTMENT (CT302 8.8MHz)

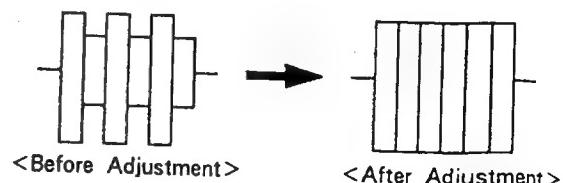
1. Input a PAL color bar signal.
2. Ground pin ⑯ of the IC304.
3. Adjust CT302 to obtain synchronization.

REFERENCE OSCILLATOR ADJUSTMENT (CT301 7.16MHz)

1. Input an NTSC color bar signal.
2. Ground pin ⑯ of IC304.
3. Adjust the CT301 to obtain synchronization.
4. Remove the jumper grounding pin ⑯ of IC304.

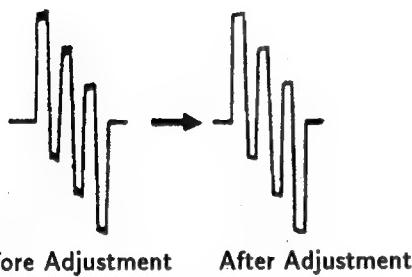
BELL FILTER ADJUSTMENT (L313)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to the emitter of Q344.
3. Adjust L313 so that the waveform is flat.

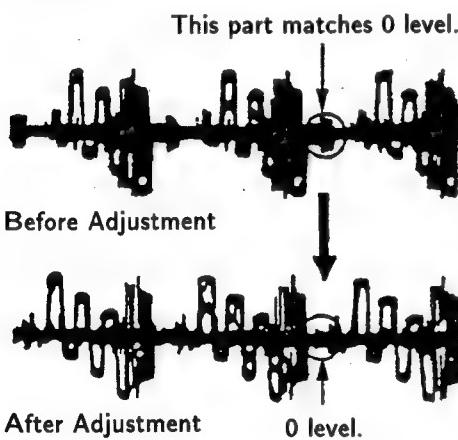


1H DELAY LINE ADJUSTMENT (L303, RV301)

1. Input a PAL color bar signal.
2. Connect the oscilloscope to pin ③ (B-Y) of IC304 and observe the waveform of the H block on the oscilloscope.
3. Adjust L303 to minimize the double waveform outline.



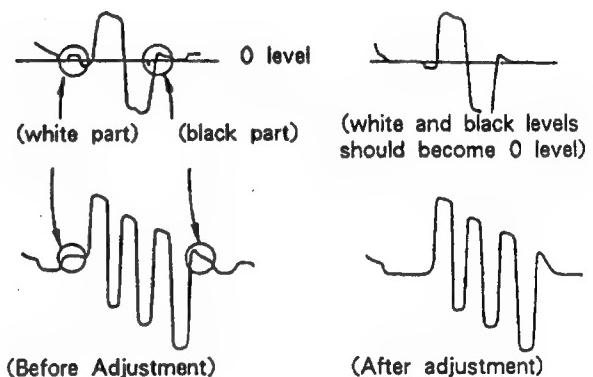
4. Input a PAL test color bar signal.
5. Rotate the RV301 and adjust till the ANTI-PAL part of the waveform matches the 0 level.



6. L303 and RV301 affect each other, Repeat till the conditions of both met.

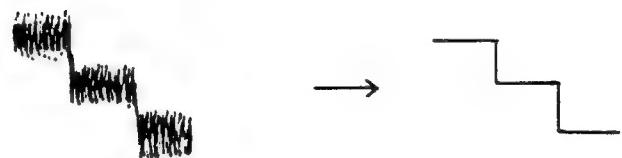
DISCRIMINATION ADJUSTMENT (RV301 and L303)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to pin ① of IC304.
3. Adjust RV301 until the white and black sections of the waveform at pin ① are at the 0 level.
4. Connect the oscilloscope to pin ③ of IC304.
5. Adjust L303 until the white and black sections of the waveform at pin ③ are at the 0 level.



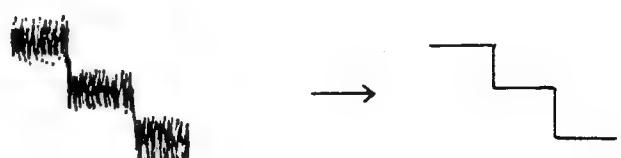
SECAM TRAP (L312)

1. Input a SECAM color bar signal.
2. Connect oscilloscope to Q340 emitter and adjust L312 to minimize color carrier on the Y-signal.

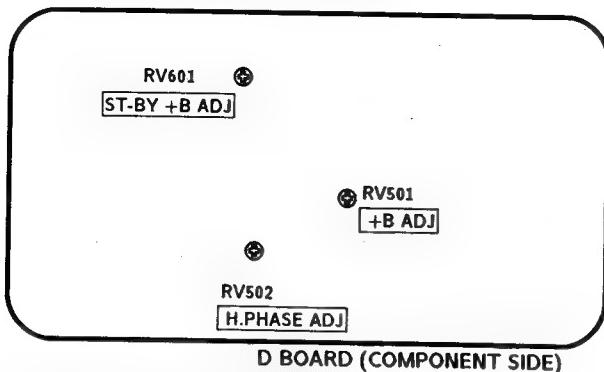


NTSC TRAP (L308)

1. Input a NTSC (3.58) color bar signal.
2. Connect oscilloscope to Q340 emitter and adjust L308 to minimize color carrier on the Y-signal.



4-3. D BOARD ADJUSTMENTS



+B ADJUSTMENT (RV501)

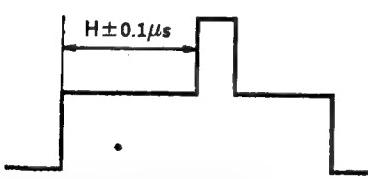
1. Connect the digital multimeter to TP91.
2. Adjust RV501 to obtain $135 \pm 0.2V$.

ST-BY +B ADJUSTMENT (RV601)

1. Put the system into \odot standby mode (remote commander).
2. Connect the digital multimeter to TP91.
3. Adjust RV601 to obtain $135 \pm 3V$.
4. Take the system out of \odot standby mode (remote commander).

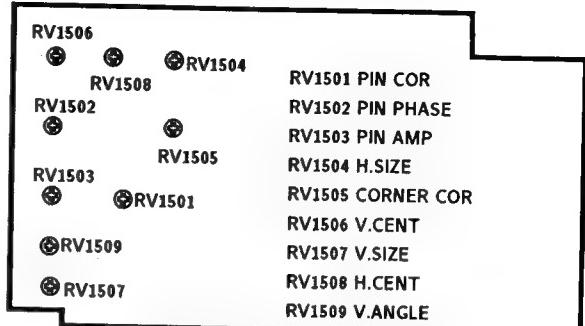
H.PHASE ADJUSTMENT (RV502)

1. Input a PAL color bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to $H \pm 0.1\mu s$.



Model Size	H
25 "	$5.1\mu s$
29 "	$5.5\mu s$

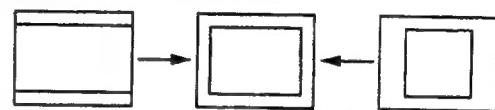
4-4. J1 BOARD ADJUSTMENTS



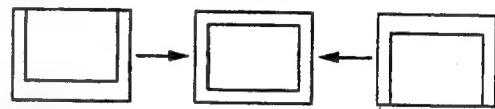
RV1508
H. CENT (HORIZONTAL CENTER)



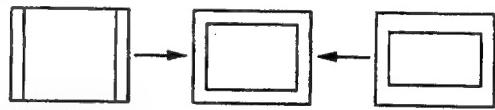
RV1504
H. SIZE (HORIZONTAL SIZE)



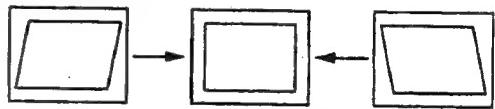
RV1506
V. CENT (VERTICAL CENTER)



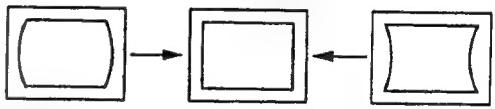
RV1507
V. SIZE (VERTICAL SIZE)



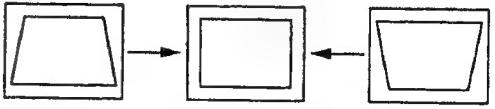
RV1509
V. ANGLE (VERTICAL ANGLE)



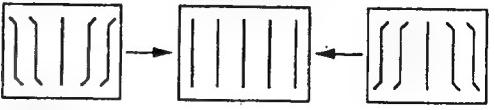
RV1503
PIN AMP (PINCUSHION AMPLIFIER)



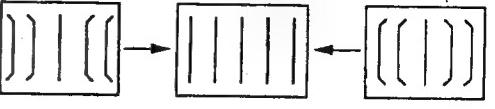
RV1502
PIN PHASE (PINCUSHION PHASE)



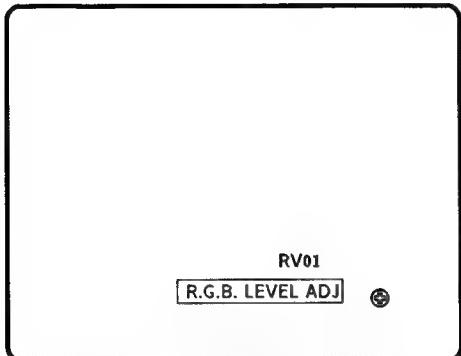
RV1501
PIN. COR (PINCUSHION CORRECT)



RV1505
CORNER. COR (CORNER CORRECT)



4-5. V BOARD ADJUSTMENTS



V BOARD (COMPONENT SIDE)

RGB LEVEL ADJUSTMENT (RV01)

1. Maximize the picture setting.
2. Adjust RV01 so that the RGB output is 0.75V.

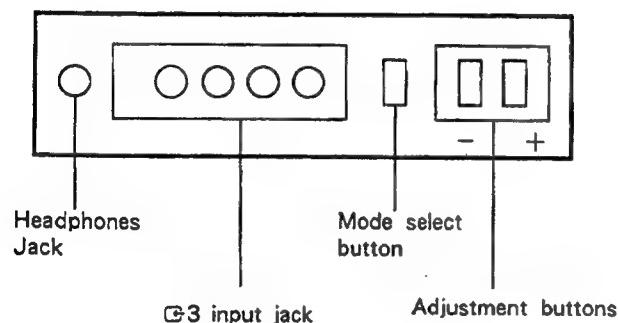
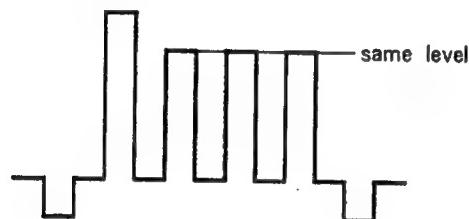
4-6. SECONDARY ADJUSTMENTS

SUB BRIGHTNESS ADJUSTMENT

1. Set the system to receive a test pattern.
2. Press $\rightarrow \cdot \leftarrow$ on the remote commander to put the system into normal mode.
3. Switch off the power.
4. While depressing the adjusting buttons + and - simultaneously, turn on the power. (SUB mode is obtained)
5. Minimize the \odot contrast setting.
6. Adjust the \odot brightness control so that the gray scale 0 IRE section is cut off completely and the 20 IRE section is barely glowing.
7. Depress the \diamond (store) button of the remote commander.
(SUB mode is released)
If there is no test color pattern
 1. Set the system to receive a color pattern.
 2. Press $\rightarrow \cdot \leftarrow$ on the remote commander to put the system into normal mode.
Set the \odot color to its normal state.
- 3-5. Steps are the same as above.
6. Since 20 IRE is nearly blue, adjust the \odot brightness control so that the blue barely glows.
7. Same as step 7 above.
8. Press $\rightarrow \cdot \leftarrow$ on the remote commander to put the system into normal mode.

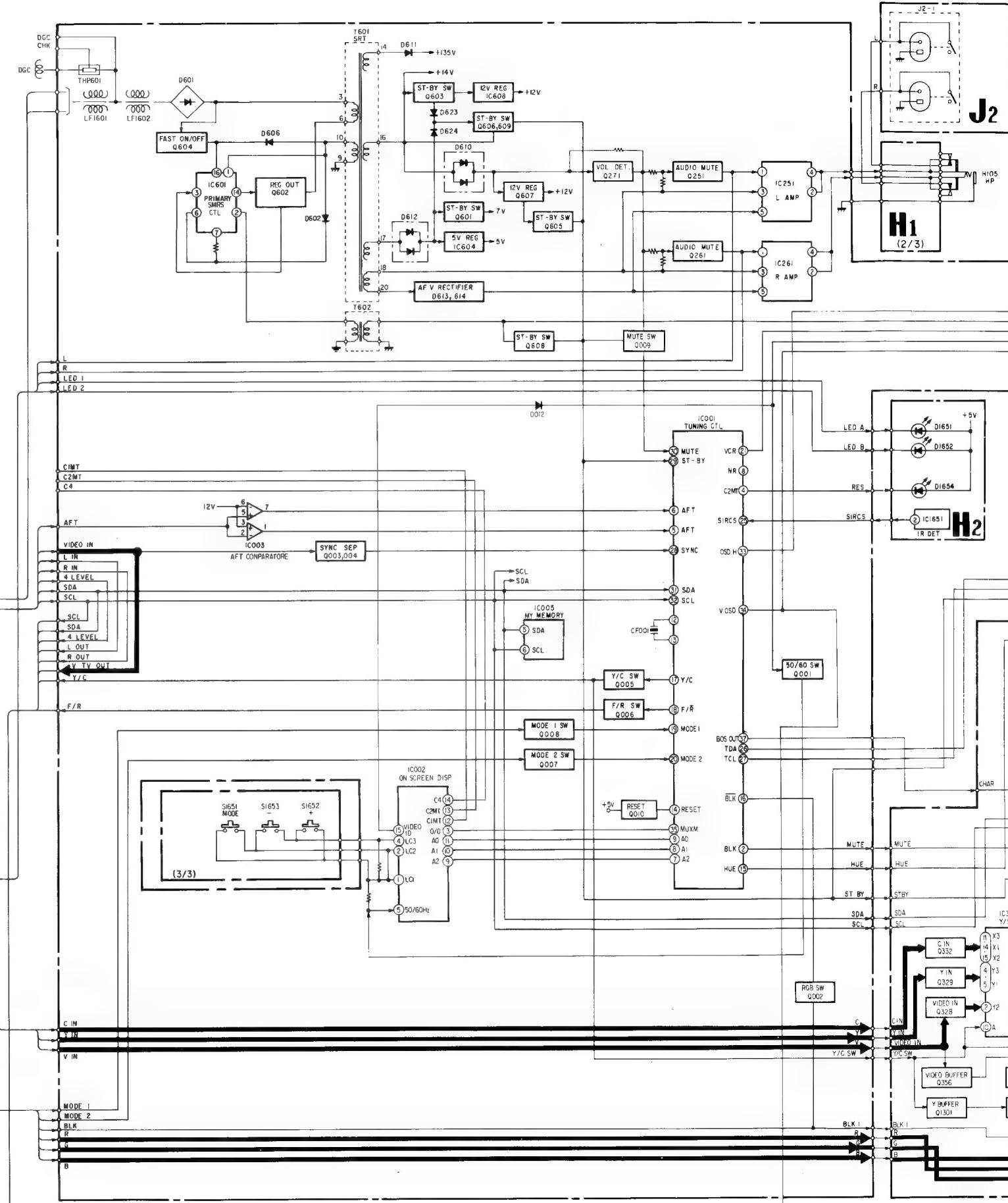
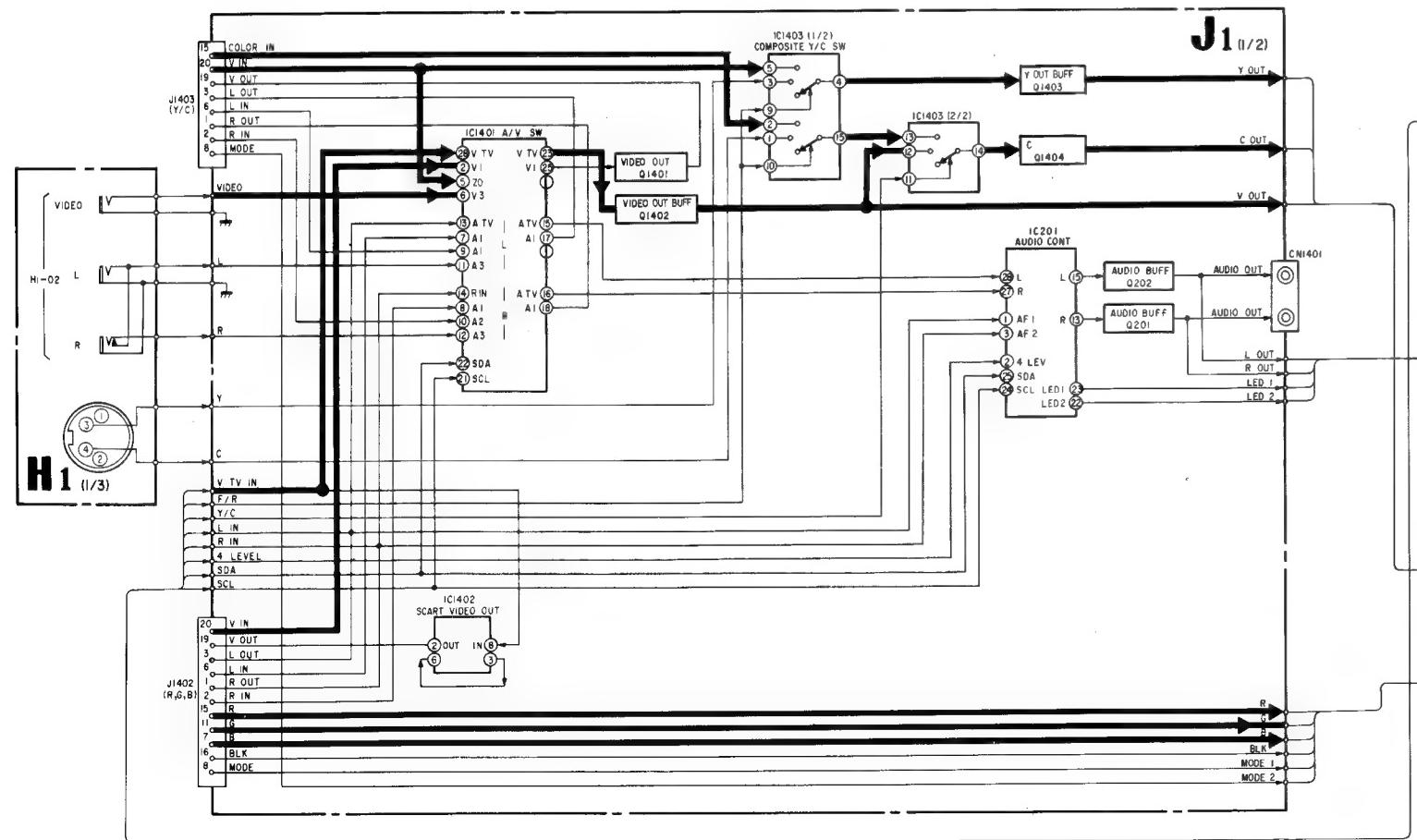
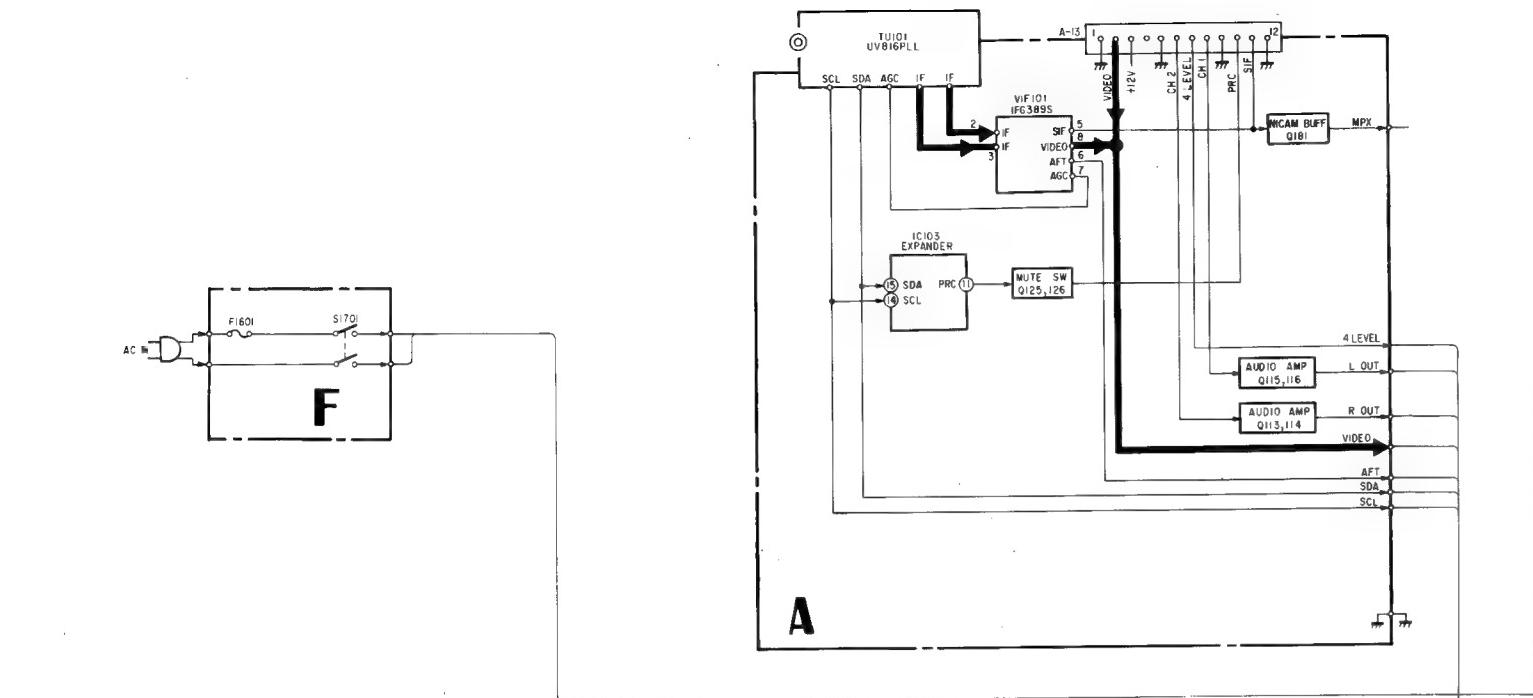
SUB COLOR ADJUSTMENT

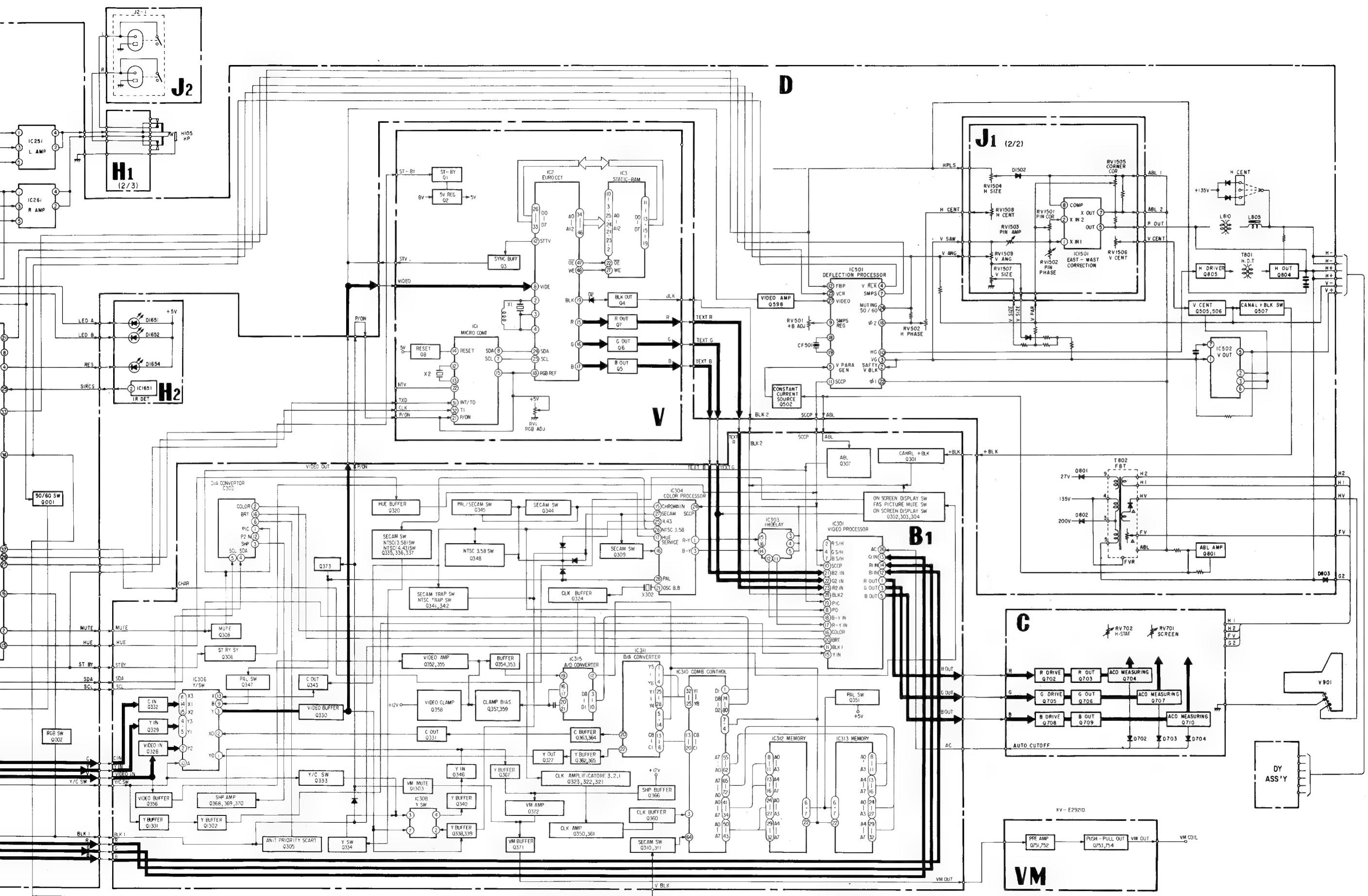
1. Set the system to receive color bars.
2. Press $\rightarrow \leftarrow$ on the remote commander to put the system into normal mode.
3. Cut off the power.
4. While depressing the adjustment buttons + and - simultaneously, turn on the power. (SUB mode is obtained).
5. Adjust the color control so that the B out waveform (pin ⑤ of C board connector CNC72) is as shown in the figure below.
6. Depress the \diamond (store) button of the remote commander. (SUB mode is released)



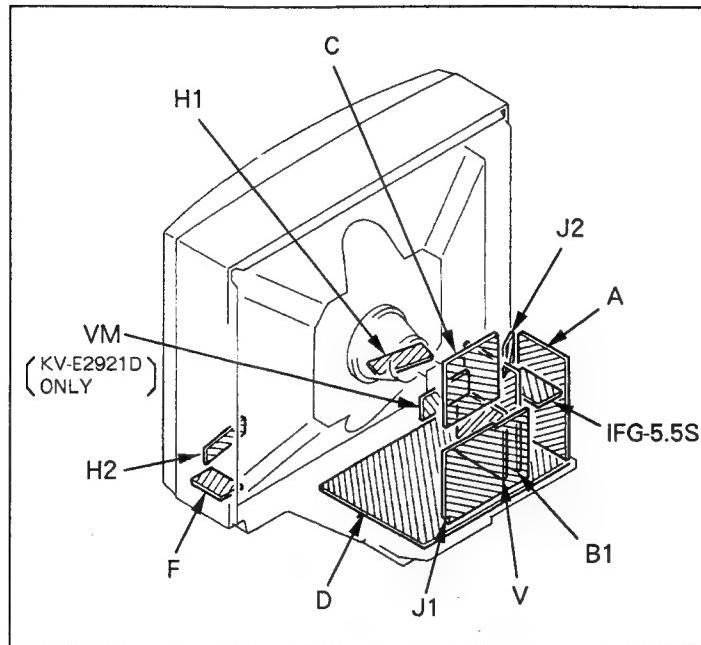
SECTION 5 DIAGRAMS

5-1. BLOCK DIAGRAM (1)





5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note :

- All capacitors are in μF unless otherwise noted.
- $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Rating electrical power: 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- : nonflammable resistor.
- : fusible resistor.
- \triangle : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B.unless otherwise noted.
- All voltages are in V.
- Readings are taken with a $10\text{M}\Omega$ digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- --- : B + line.
- $\text{---} \rightarrow$: signal path. (RF)

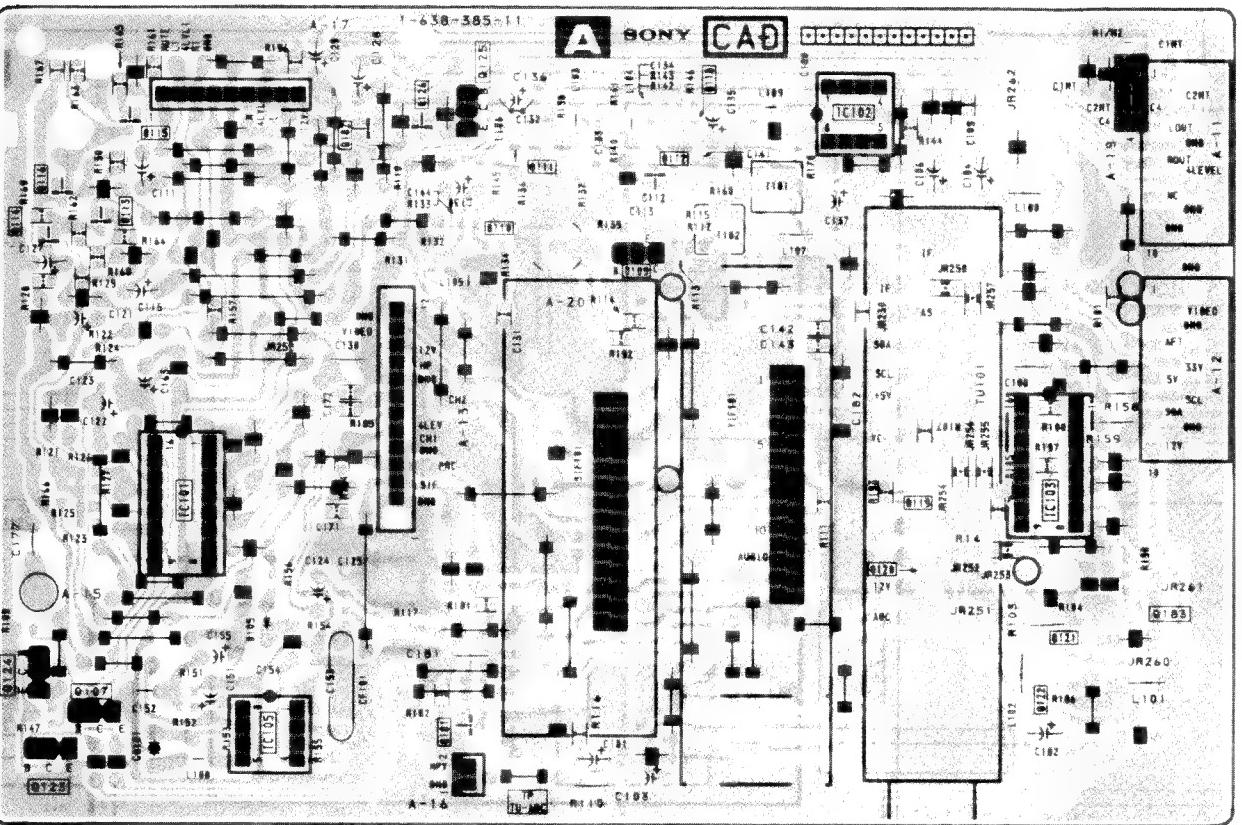
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

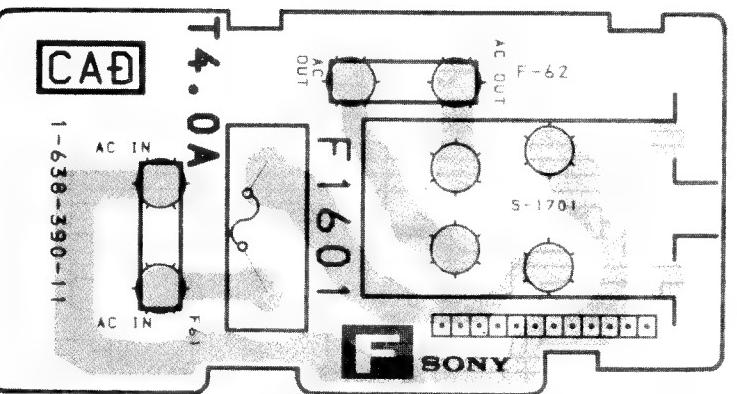
A [TUNER, SIF, VIF] **F** [AC IN, POWER SW] **J1** [AUDIO CONTROL, AV INPUT, Y/C INPUT, SCART VIDEO OUT, EAST-WEST CORRECTION] **J2** [SPEAKER TERMINAL]

VM [V

-A BOARD-



-F BOARD-



-J1 BO

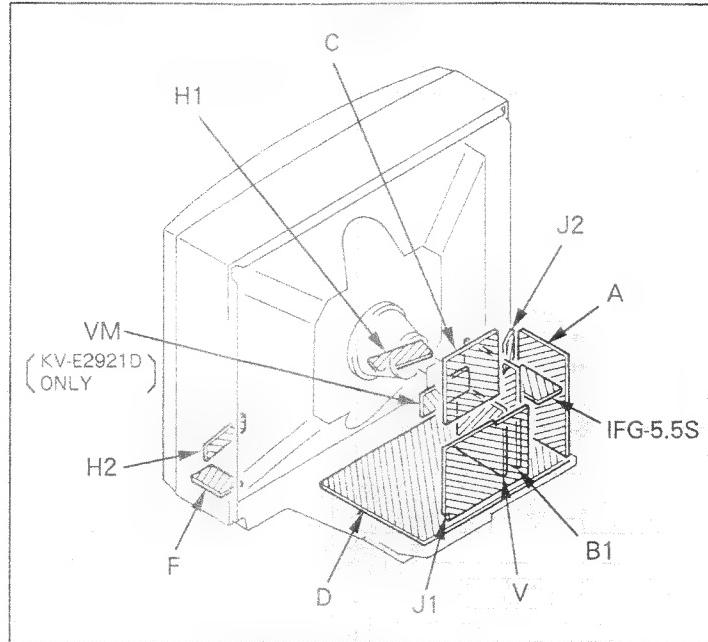
V

16

946
948
H-CENT
12V
ABL 1
H-PLS
946
948
V
V-AMC
27V-40
P OUT
946

1-5

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note :

- All capacitors are in μF unless otherwise noted.
- PF : $\mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

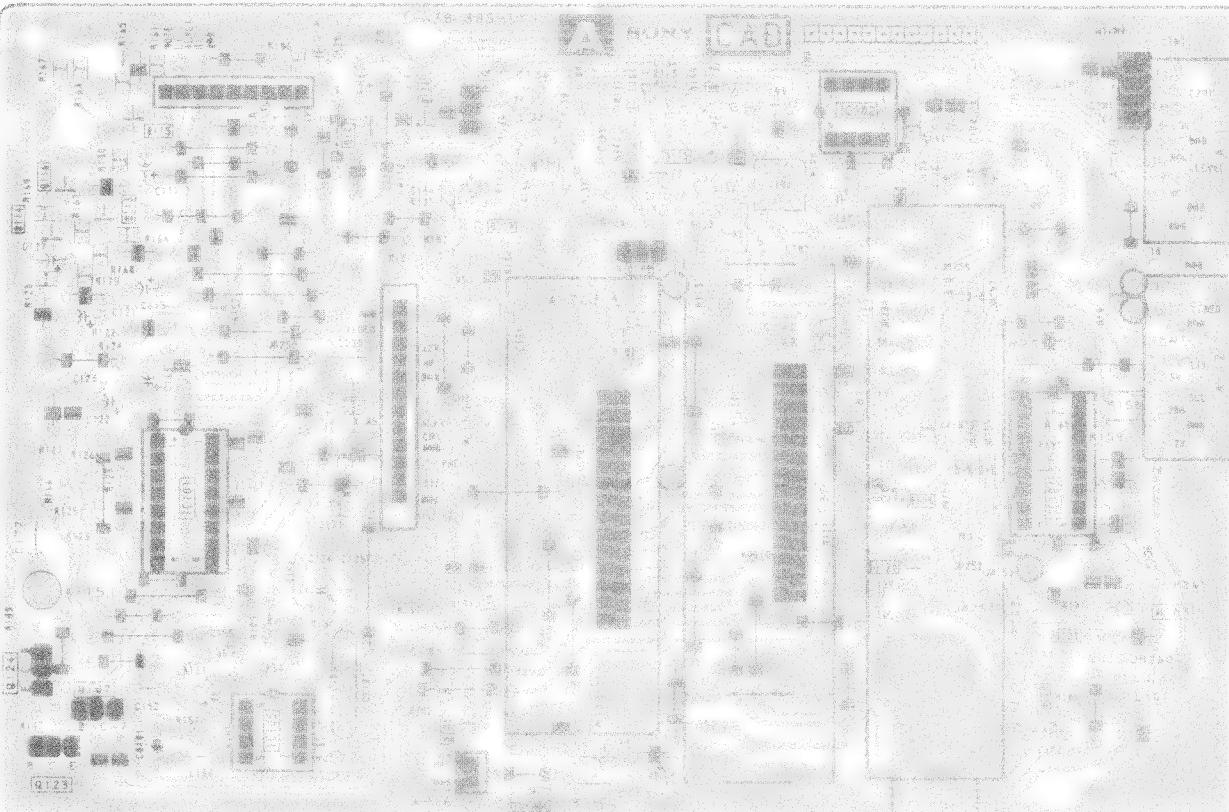
Pitch : 5mm
Rating electrical power: 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B.unless otherwise noted.
- All voltages are in V.
- Readings are taken with mV 10M Ω digital multimeter.
- Readings are taken with color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B + line.
- : signal path. (RF)

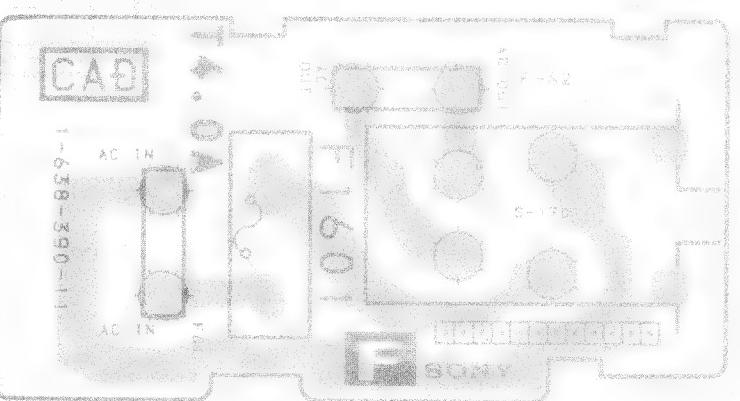
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- A BOARD -



- F BOARD -



PEAKER TERMINAL]

VM

[VM AMP]

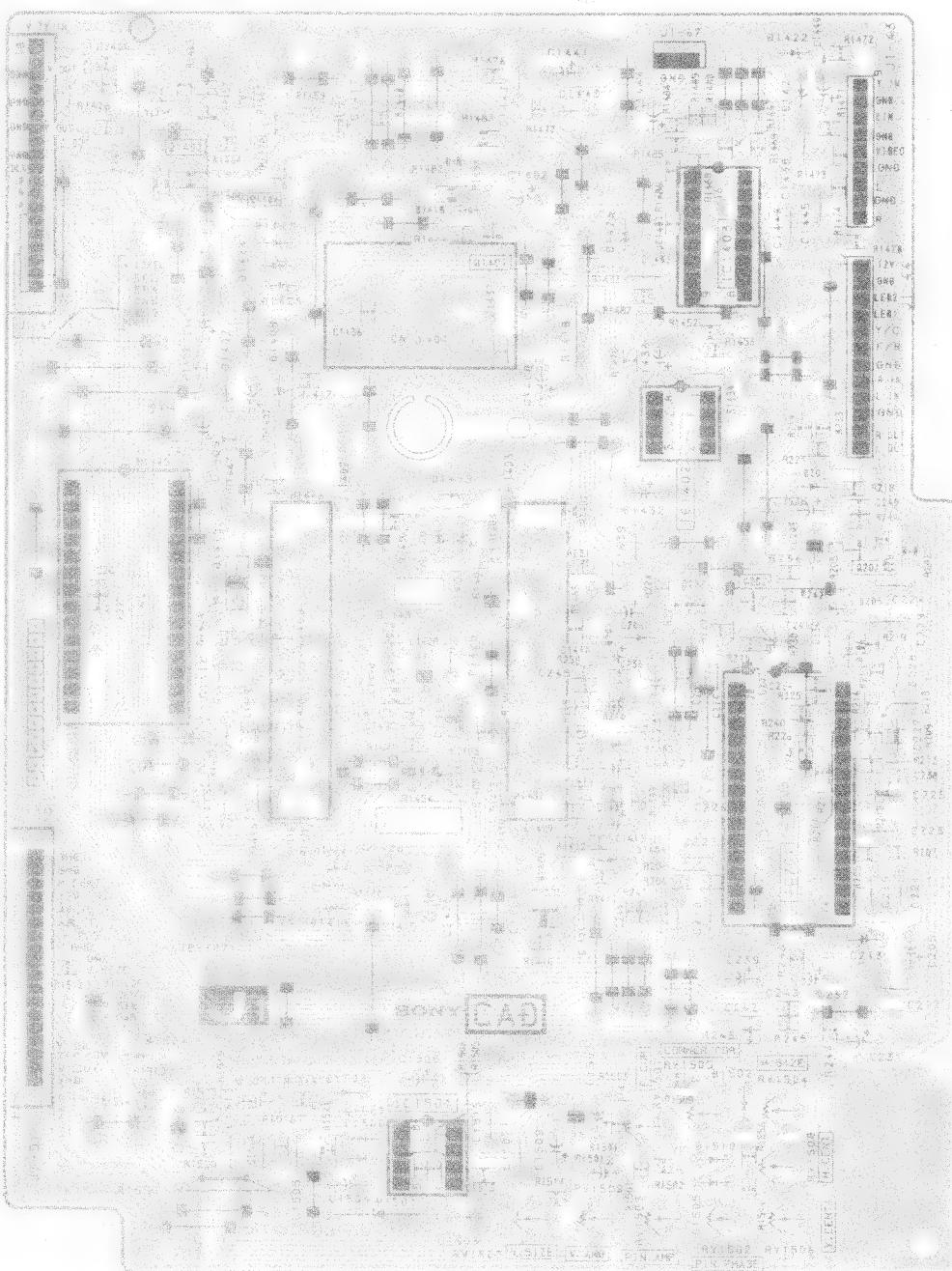
H1

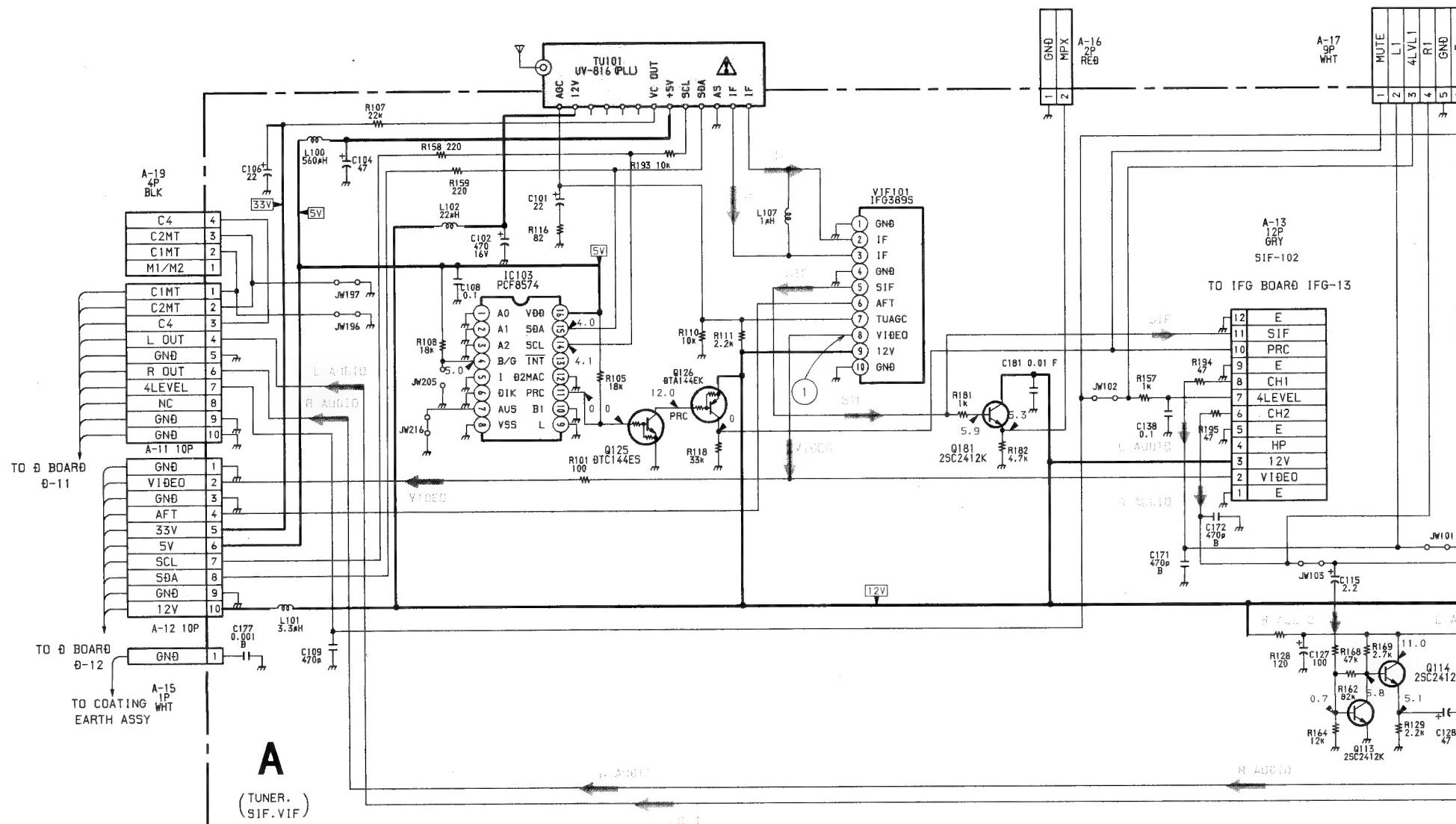
CONTROL SW, AV INPUT
HEADPHONE

H2

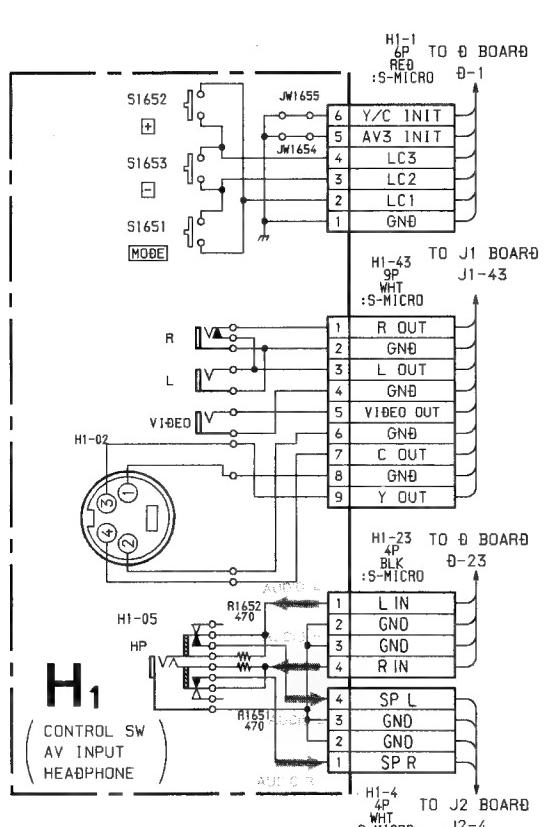
SIRCS, RECEIVER,
INDICATOR

-J1 BOARD-





G



A BOARD

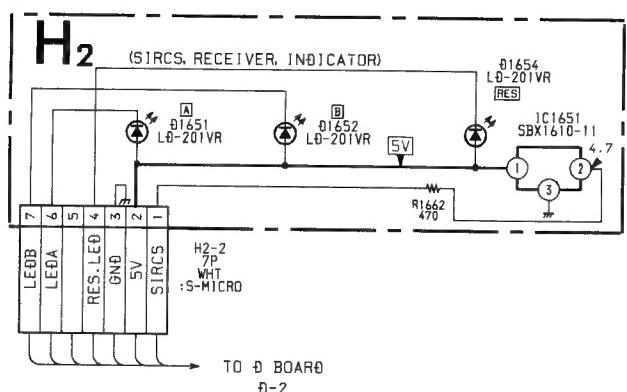
IC103	PCF857
Q113	2SC241
Q114	2SC241
Q115	2SC241
Q116	2SC241
Q125	DT144
Q126	DTA144
Q181	2SC241

1

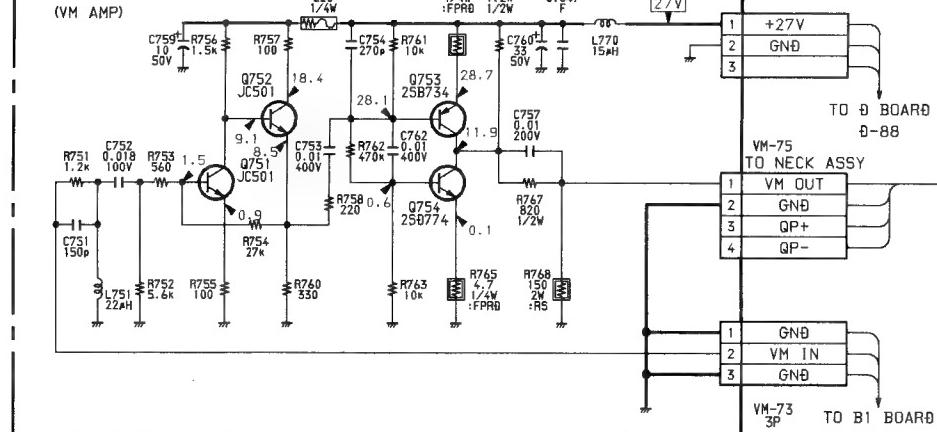
1

N

0



VM (KV-E2921D ONLY)

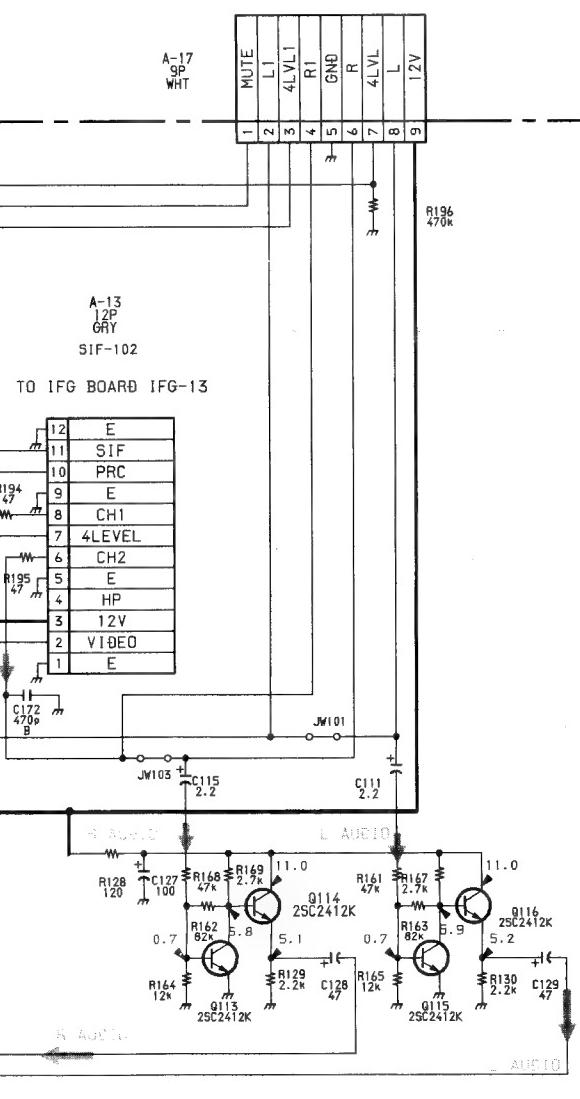


H2 BOARD

IC1651	SBX1610-11	INFRARED RECEIVER
01651	L0-201VR	AUDIO CHANNEL A INDICATOR
01652	L0-201VR	AUDIO CHANNEL B INDICATOR
01654	L0-201VR	RESET

VM BOARD (KV-E2921D ON

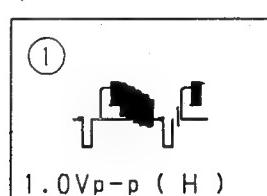
Q751	JC501	RB
Q752	JC501	RB
Q753	2SB734	PU
Q754	2SB774	PU



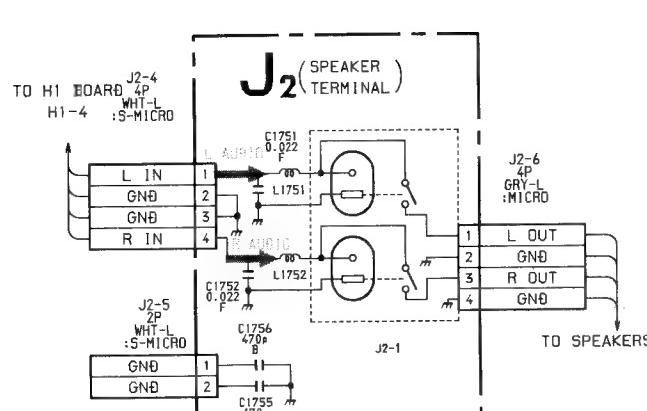
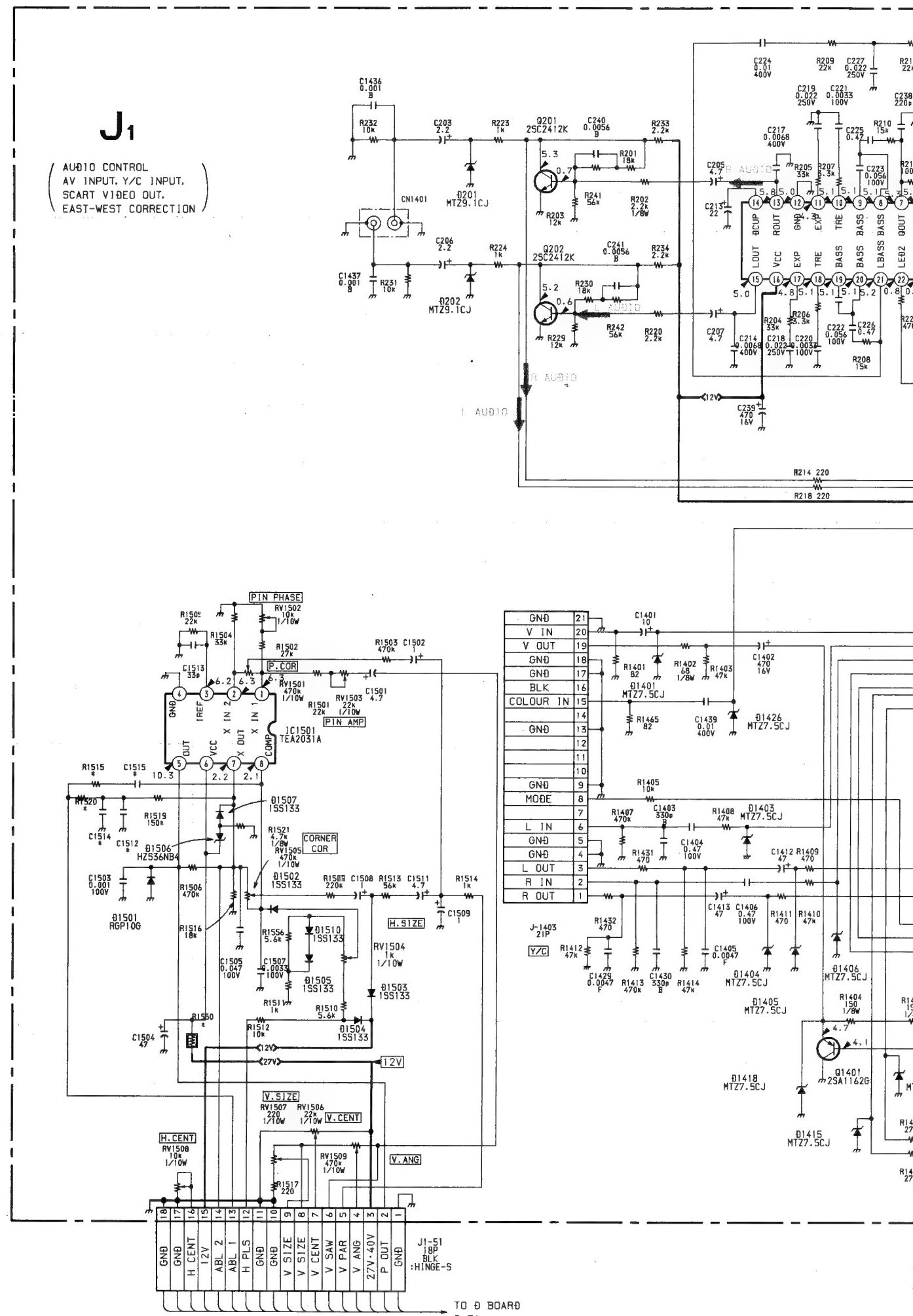
A BOARD

IC103	PCF8574	EXPANDER
Q113	2SC2412K	AUDIO AMP
Q114	2SC2412K	AUDIO AMP
Q115	2SC2412K	AUDIO AMP
Q116	2SC2412K	AUDIO AMP
Q125	DTG144ES	MUTE SW
Q126	DTA144EK	MUTE SW
Q181	2SC2412K	NICAM BUFFER

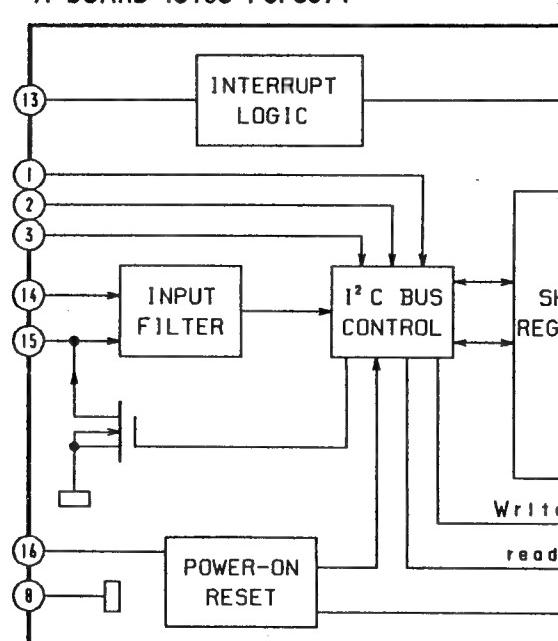
• WAVEFORMS A BOARD



TO Ø BOARD
Ø-62

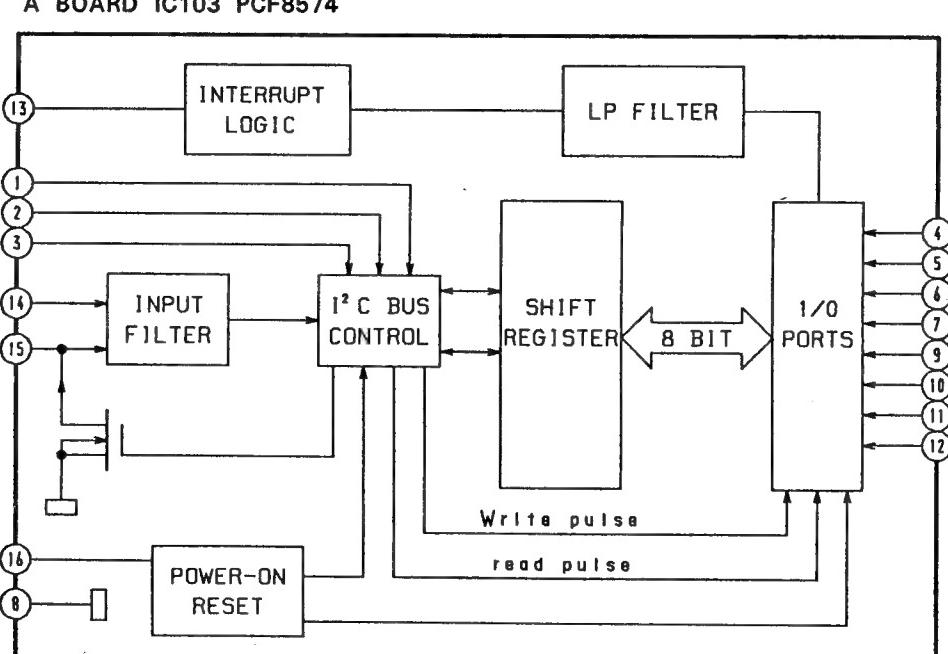
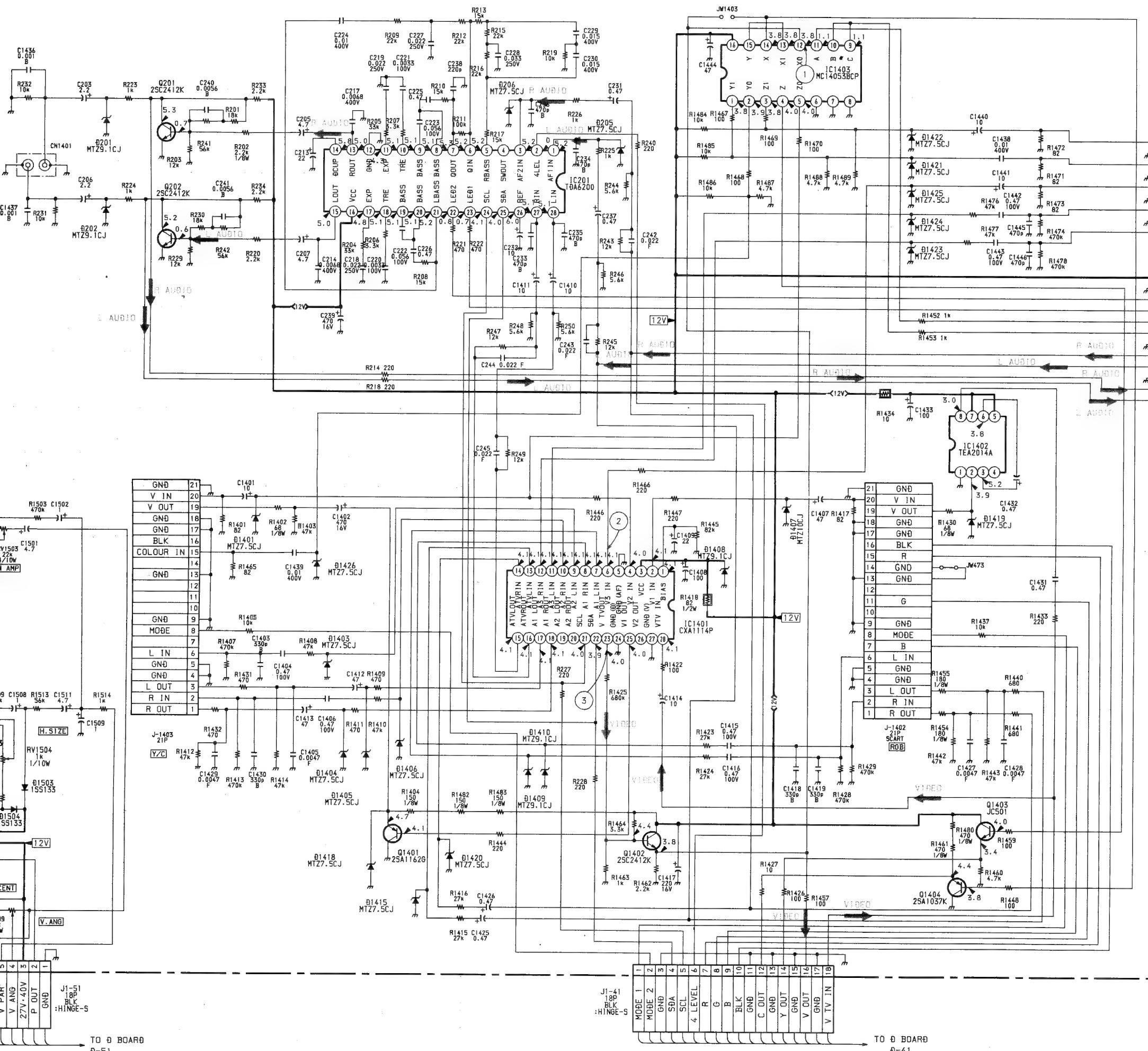


A BOARD IC103 PCE8E7A



VM BOARD (KV-E2921D ONLY)

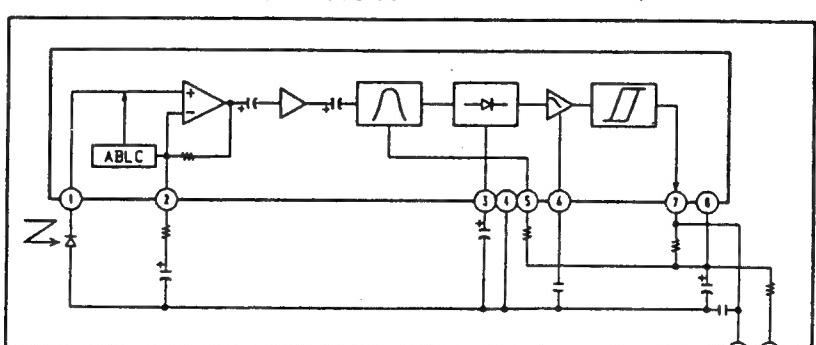
Q751	JC501	REF AMP
Q752	JC501	REF AMP
Q753	2SB734	PUSH-PULL OUT
Q754	2SA724	PUSH-PULL OUT

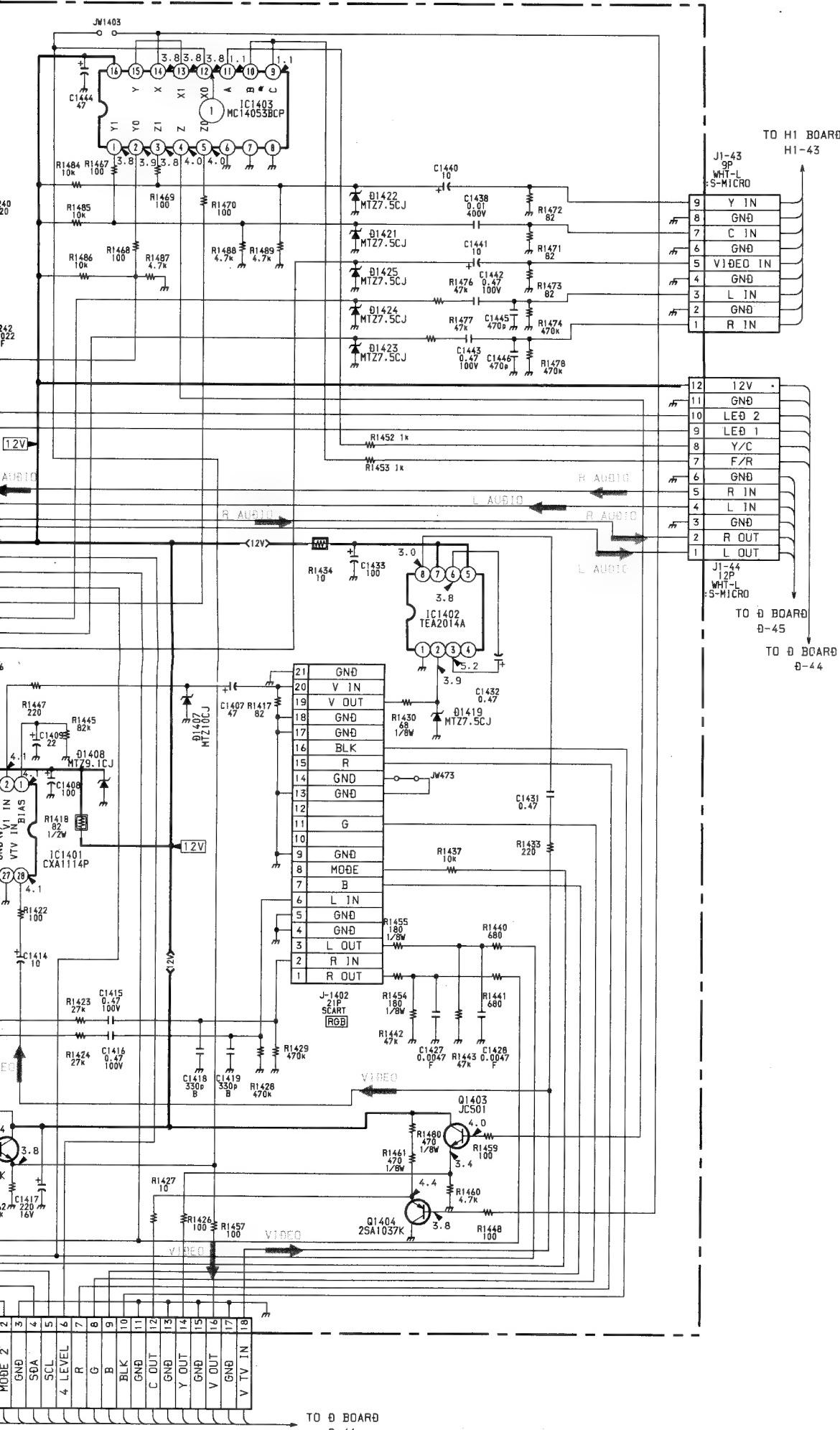


J1 BOARD *MARK

	KV-E2521D	K
C1512	0.0068MF	400V
C1514	0.022MF	250V
C1515	820PF	50V
R1515	680K 1/10W:CHIP	
R1520	470K 1/10W:CHIP	39

H2 BOARD IC1651 SBX1610-11



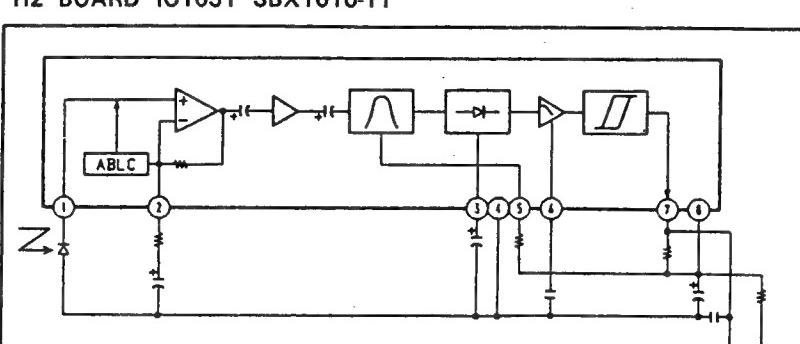


J1 BOARD *MARK

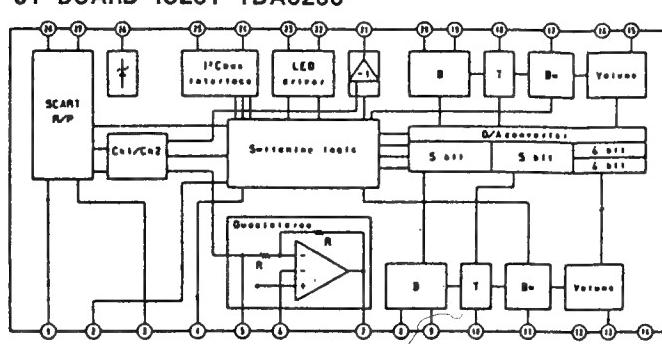
	KV-E2521D	KV-E2921D
C1512	0.0068MF 400V	—
C1514	0.022MF 250V	—
C1515	820PF 50V	—
R1515	680K 1/10W:CHIP	—
R1520	470K 1/10W:CHIP	390K 1/10W:CHIP
R1550	JW	11W : RS

NOT MOUNTED

H2 BOARD IC1651 SBX1610.11



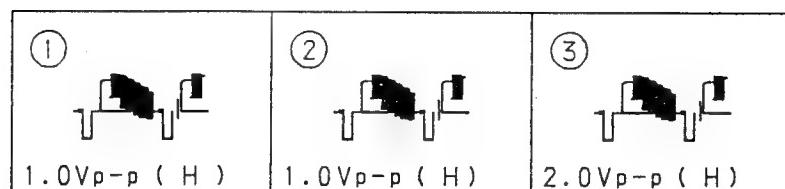
J1 BOARD IC201 TDA6200



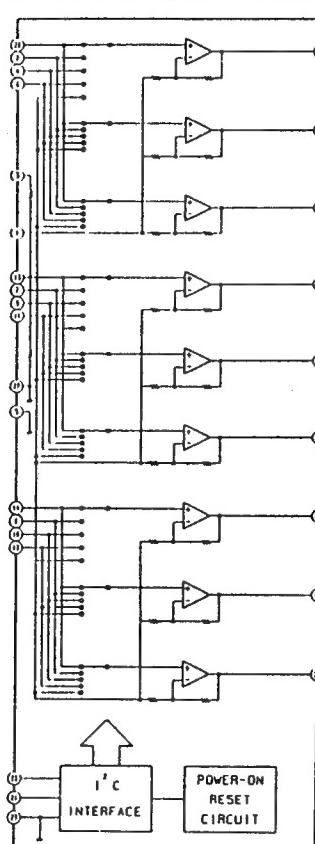
J1 BOARD

IC201	TDA6200	AUDIO CONTROL
IC1401	CXA1114P	AV SW
IC1402	TEA2014A	SCART VIDEO OUT
IC1403	MC14053BCP	COMPOSITE Y/C SW
IC1501	TEA2031A	EAST-WEST CORRECTION
Q201	2SC2412K	AUDIO R BUFF
Q202	2SC2412K	AUDIO L BUFF
Q1401	2SA1162G	VIDEO OUT
Q1402	2SC2412K	VIDEO OUT BUFF
Q1403	JC501	Y OUT BUFF
Q1404	2SA1037K	C OUT BUFF
D201	MTZJ-T-77-9.1C	PROTECT
D202	MTZJ-T-77-9.1C	PROTECT
D205	MTZJ-T-77-7.5C	PROTECT
D206	MTZJ-T-77-7.5C	PROTECT
D1401	MTZJ-T-77-7.5C	PROTECT
D1403	MTZJ-T-77-7.5C	PROTECT
D1404	MTZJ-T-77-7.5C	PROTECT
D1405	MTZJ-T-77-7.5C	PROTECT
D1406	MTZJ-T-77-7.5C	PROTECT
D1407	MTZJ-T-77-10C	PROTECT
D1408	MTZJ-T-77-9.1C	REG
D1409	MTZJ-T-77-9.1C	PROTECT
D1410	MTZJ-T-77-9.1C	PROTECT
D1415	MTZJ-T-77-7.5C	PROTECT
D1418	MTZJ-T-77-7.5C	PROTECT
D1419	MTZJ-T-77-7.5C	PROTECT
D1420	MTZJ-T-77-7.5C	PROTECT
D1421	MTZJ-T-77-7.5C	PROTECT
D1422	MTZJ-T-77-7.5C	PROTECT
D1423	MTZJ-T-77-7.5C	PROTECT
D1424	MTZJ-T-77-7.5C	PROTECT
D1425	MTZJ-T-77-7.5C	PROTECT
D1426	MTZJ-T-77-7.5C	PROTECT
D1501	RGP10GPKG23	PROTECT
D1502	ISS133	DE COUPLING H SIZE
D1503	ISS133	CLIPPING V PARABORA
D1504	ISS133	CLIPPING H PULSE
D1505	ISS133	REG
D1506	HZS36NB4TØ	PROTECT
D1507	ISS133	PROTECT
D1510	ISS133	REG

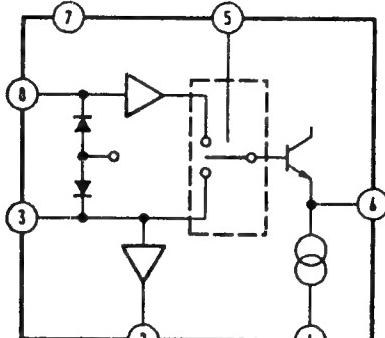
- WAVEFORMS J1 BOARD



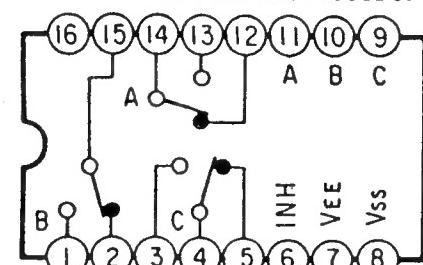
J1 BOARD IC1401 CXA1114P



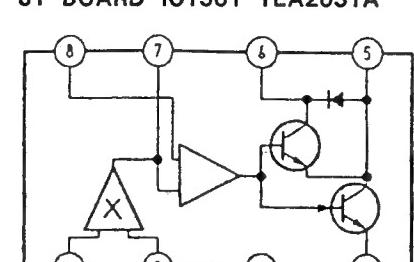
J1 BOARD IC1402 TEA2014A



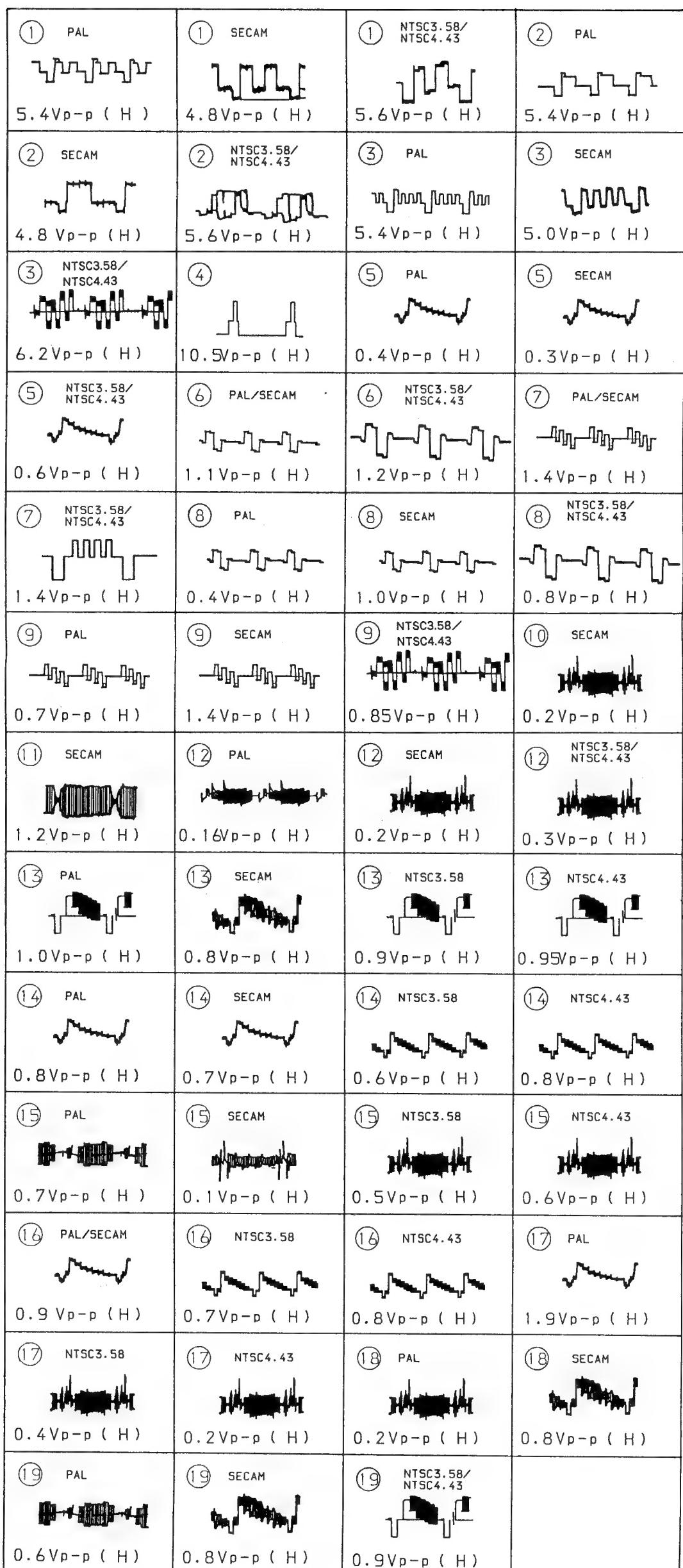
J1 BOARD IC1403 MC14053BCP



J1 BOARD IC1501 TEA2031A



• WAVEFORMS B1 BOARD



As to the voltage value shown by the mark * on the Schematic Diagram, see the another list.

IC·NO	PIN·NO	PAL	SECAM	NTSC 3.38	NTSC 4.43
IC301	(5)	6.7	4.8	4.8	4.8
	(15)	8.9	7.0	7.0	7.0
	(19)	3.4	3.4	3.8	3.4
	(7)	6.6	6.6	6.0	6.3
	(1)	0.1	6.8	6.9	6.8
	(5)	9.9	0	9.9	9.9
	(7)	4.6	0	4.6	4.6
	(8)	3.4	3.0	3.4	3.4
	(9)	3.4	3.0	3.4	3.4
	(10)	4.6	3.4	4.6	4.6
	(11)	2.3	3.1	3.1	2.3
	(12)	5.6	5.6	5.6	7.4
	(13)	7.5	7.5	5.7	5.7
	(25)	0.1	0.1	0.1	6.0
	(26)	0.1	0.1	6.0	0.1
	(27)	0.1	6.0	0.1	0.1
	(28)	6.0	0.1	0.1	0.1

B1 BOARD

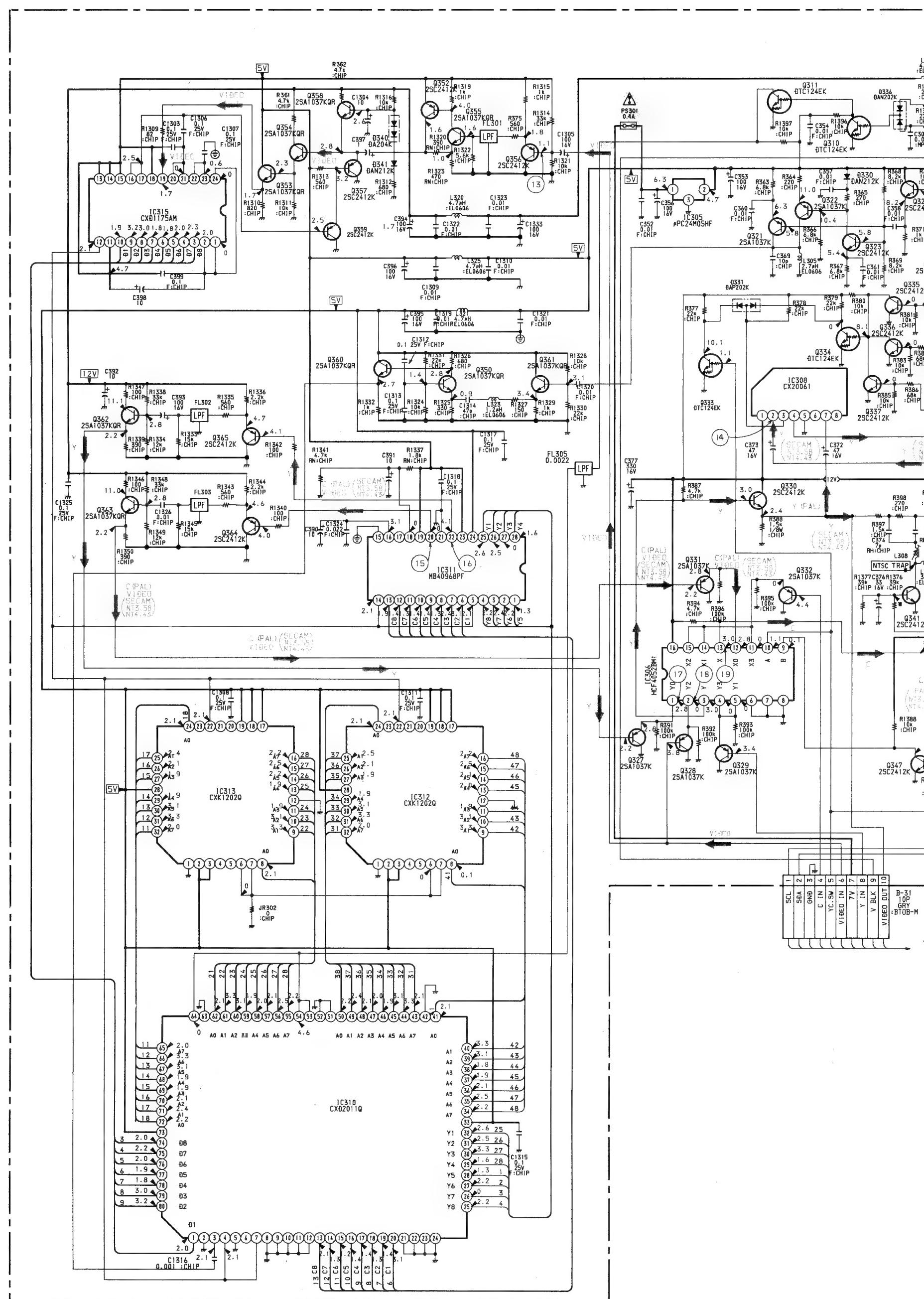
IC301	TDA4580-V4	V1DEO PROCESSOR
IC302	TDA8442-N3	D/A CONVERTOR
IC303	TDA4660T	IH DELAY
IC304	TDA4650WP	COLOR PROCESSOR
IC305	μPC24M05HF	REGULATAR
IC306	HCF4052BM1	Y/C SW
IC308	CX20061	Y INTERRUPT
IC310	CX02011Q	COMB CONTROL
IC311	MB40968PF	D/A CONVERTER
IC312	CXK1202Q	MEMORY
IC313	CXK1202Q	MEMORY
IC315	CXB1175AM	A/D CONVERTER
Q301	2SC2412K	CANRL +BLK
Q302	2SC2412K	ON SCREEN DISPLAY SW
Q303	2SC2412K	FAS PICTURE MUTE SW
Q304	2SC2412K	ON SCREEN DISPLAY SW
Q305	DTA144EK	ANIT PRIORITY SCART
Q306	2SC2412K	STBY SW
Q307	2SC2412K	ABL
Q308	DTA124EK	MUTE
Q310	DTA124EK	SECAM SW
Q311	DTA124EK	SECAM SW
Q320	2SC2412K	HUE BUFFER
Q321	2SA1037K	CLK AMP3
Q322	2SA1037K	CLK AMP2
Q323	2SC2412K	CLK AMP1
Q324	2SC2412K	CLK BUFFER
Q327	2SA1037K	Y OUT
Q328	2SA1037K	VIDEO IN
Q329	2SA1037K	Y IN
Q330	2SC2412K	VIDEO BUFFER
Q331	2SA1037K	C OUT
Q332	2SA1037K	C IN
Q333	DTA124EK	Y/C SW
Q334	DTA124EK	Y SW
Q335	2SC2412K	SECAM SW
Q336	2SC2412K	NTSC (3.58) SW
Q337	2SC2412K	NTSC (4.43) SW
Q338	2SA1037K	Y BUFFER
Q339	2SC2412K	Y BUFFER
Q340	2SC2412K	Y BUFFER
Q341	2SC2412K	SECAM TRAP SW
Q342	2SC2412K	NTSC TRAP SW
Q343	2SC2412K	C OUT
Q344	2SC2412K	SECAM SW
Q345	2SC2412K	PAL/SECAM SW
Q346	2SC2412K	Y IN
Q347	2SC2412K	PAL SW
Q348	DTA124EK	NTSC (3.58) SW
Q350	2SA1037KQR	CLK AMP
Q352	2SC2412K	VIDEO AMP
Q353	2SA1037KQR	BUFFER
Q354	2SA1037KQR	BUFFER
Q355	2SA1037KQR	VIDEO AMP
Q356	2SC2412K	VIDEO BUFFER
Q357	2SC2412K	CLAMP BIAS
Q358	2SA1037KQR	VIDEO CLAMP
Q359	2SC2412K	CLAMP BIAS
Q360	2SA1037KQR	CLK BUFFER
Q361	2SA1037KQR	CLK AMP
Q362	2SA1037KQR	Y BUFFER
Q363	2SA1037KQR	C BUFFER
Q364	2SC2412K	C BUFFER
Q365	2SC2412K	Y BUFFER
Q366	2SC2412K	SHP BUFFER
Q367	2SC2412K	Y BUFFER
Q368	2SC2412K	SHP AMP
Q369	2SC2412K	SHP AMP
Q370	2SC2412K	SHP AMP
Q371	2SC2412K	VM BUFFER
Q372	2SC2412K	VM AMP
Q373	DTA124EK	
Q1301	DTA124EK	Y BUFFER
Q1302	2SC2412K	Y BUFFER
Q1303	2SC2412K	VM MUTE
D301	1MN10	ACQ AT ATBY
D304	DA212K	PROTECT
D305	DA212K	PROTECT
D307	MA3110M	PROTECT
D308	DA212K	PROTECT
D309	DA212K	PROTECT
D310	MA3110M	PROTECT
D311	MA3110M	PROTECT
D312	MA3110M	PROTECT
D314	DA204K	PROTECT
D318	DA204K	PROTECT
D319	DA204K	PROTECT
D320	DA204K	PROTECT
D321	MA3056	REG
D322	DA212K	PROTECT
D330	DA212K	BIAS
D331	DA202K	Y/C SW
D333	1MN10	SYSTEM SW
D336	DA202K	CORRECT SW
D340	DA204K	VIDEO AMP
D341	DA212K	VIDEO AMP

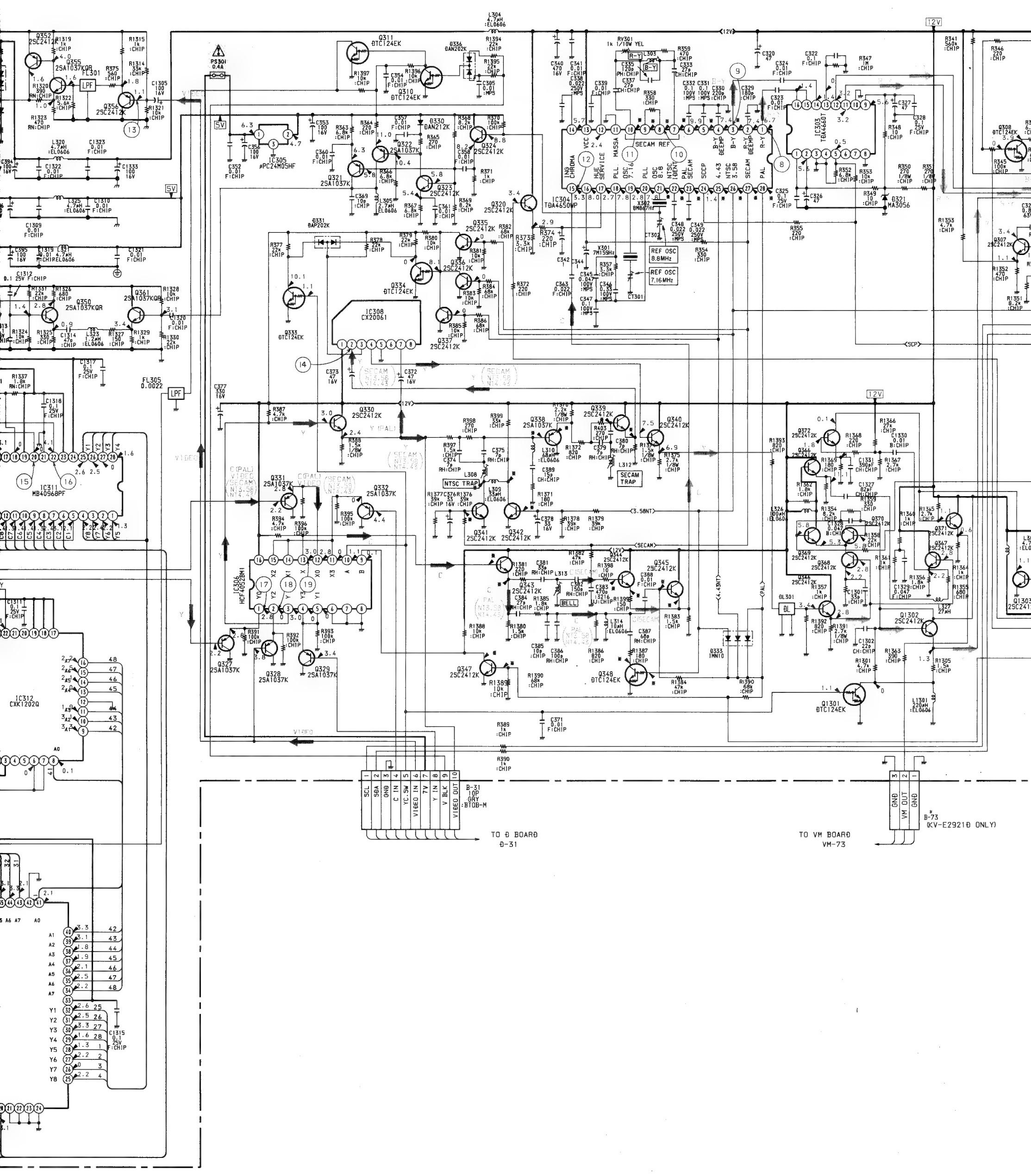
B1 BOARD * MARK

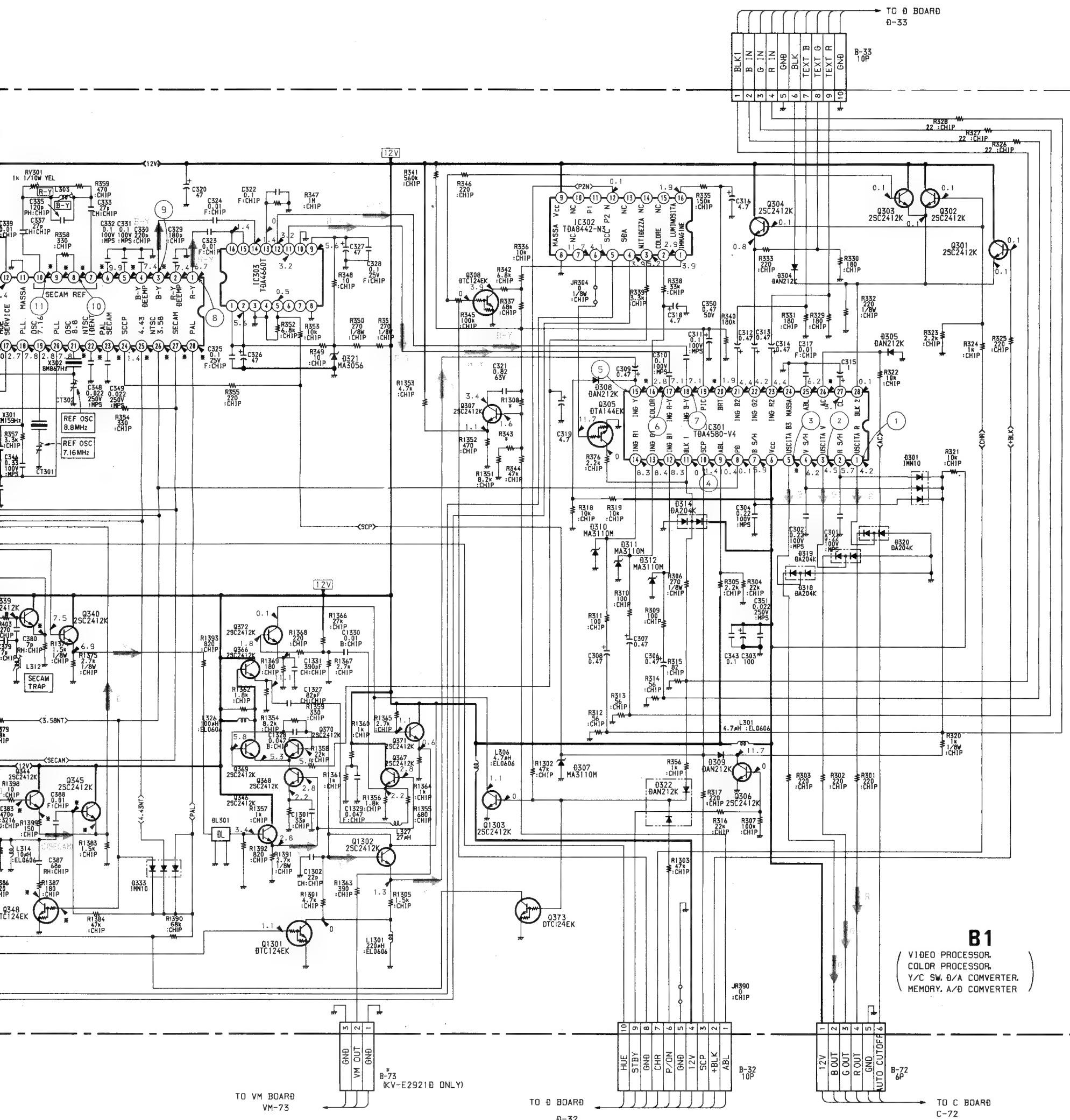
	KV-E2521D	KV-E2921D
R343	560Ω 1/10W	2.2k 1/10W
R1308	0Ω 1/10W	4.7k 1/10W
B-73	OPEN	3P

1 2 3 4 5 6 7 8 9 10

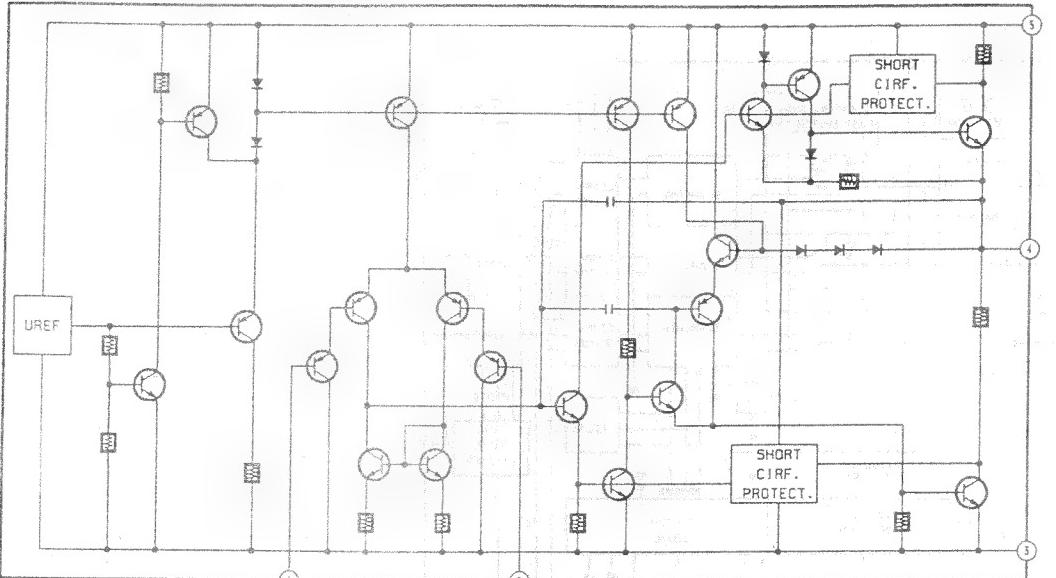
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O



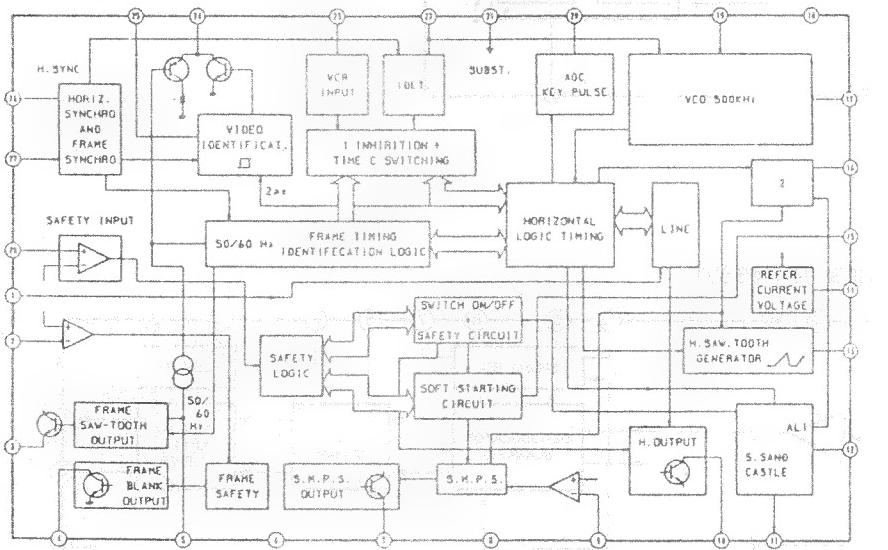




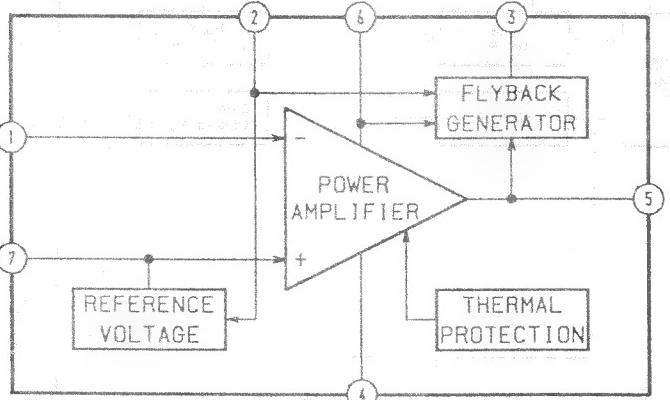
D BOARD IC251/261 TDA2050



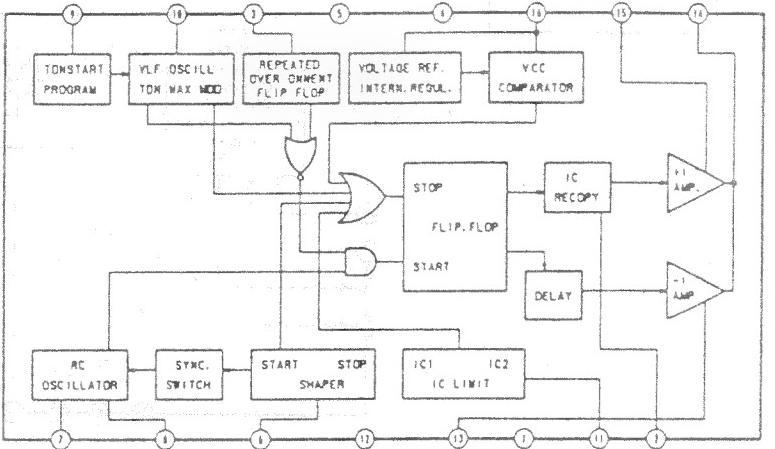
D BOARD IC501 TEA2028B



D BOARD IC502 TDA8170



D BOARD IC601 TEA2260



D [TUNING CONTROL, POWER CONTROL,
AUDIO OUT, H/V OUT]

-D BOARD-



IC

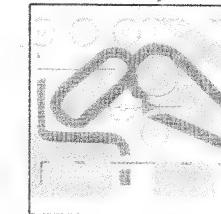
IC001	B-2	D010	I-2
IC002	E-2	D011	I-2
IC003	D-1	D012	D-2
IC005	H-2	D013	E-2
IC251	G-5	D271	C-6
IC261	D-5	D272	E-6
IC501	H-7	D501	I-8
IC502	G-7	D504	F-6
IC601	A-8	D506	H-7
IC604	A-5	D508	J-6
IC608	B-3	D509	F-7
		D511	G-7
		D512	G-7
		D513	G-7
		D514	G-6
		D515	F-6
		D601	A-8
		D602	C-8
		D603	A-7
		D604	A-7
		D605	C-8
		D606	C-8
		D607	B-8
		D608	C-9
		D609	B-8
		D610	C-5
		D611	E-7
		D612	B-5
		Q251	G-5
		D613	A-6
		Q261	E-5
		D614	A-6
		Q271	D-6
		D616	E-6
		Q502	H-7
		D617	B-7
		Q505	F-7
		D618	E-6
		Q506	F-7
		D619	B-8
		Q507	J-6
		D620	E-6
		Q598	I-2
		D621	B-8
		Q601	B-4
		D622	E-6
		Q602	C-10
		D623	B-5
		Q603	B-5
		D624	C-5
		Q604	A-7
		D630	E-7
		Q605	E-7
		D801	G-10
		Q606	D-5
		D802	H-12
		Q607	D-6
		D803	I-13
		Q608	D-6
		D804	F-9
		Q609	C-5
		D805	F-9
		Q801	J-6
		D806	F-12
		Q804	G-13
		D807	F-12
		Q805	G-9
		D808	E-11

D VR

D003	B-3	RV501	G-6
D005	I-2	RV502	I-8
D006	G-1	RV601	A-8
D007	B-2		
D009	F-1		

D[TUNING CONTROL, POWER CONTROL,
AUDIO OUT, H/V OUT]**NOTE:**

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

**IC**

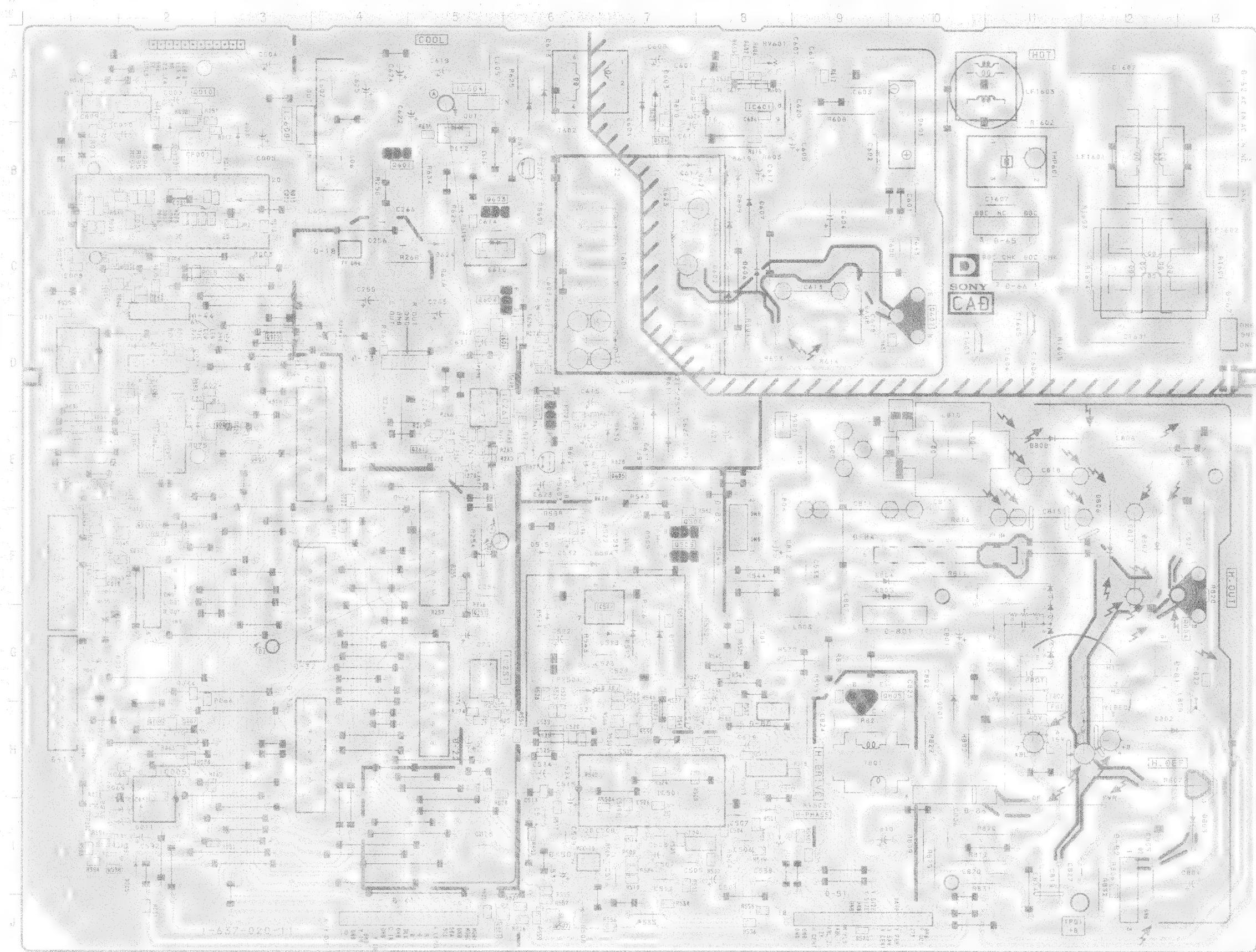
IC001	B-2	D010	I-2
IC002	E-2	D011	I-2
IC003	D-1	D012	D-2
IC005	H-2	D013	E-2
IC251	G-5	D271	C-6
IC261	D-5	D272	E-6
IC501	H-7	D501	I-8
IC502	G-7	D504	F-6
IC601	A-8	D506	H-7
IC604	A-5	D508	J-6
IC608	B-3	D511	G-7
		D512	G-7
		D513	G-7
		D514	G-6
		D515	F-6
		D601	A-8
		D602	C-8
		D603	A-7
		D604	A-7
		D605	C-8
		D606	C-8
		D607	B-8
		D608	C-9
		D609	B-8
		D610	C-5
		D611	E-7
		D612	B-5
		D613	A-6
		D614	A-6
		D616	E-6
		D617	B-7
		D618	E-6
		D619	B-8
		D620	E-6
		D621	B-8
		D622	E-6
		D623	B-5
		D624	C-5
		D630	E-7
		D801	G-10
		D802	H-12
		D803	I-13
		D804	F-9
		D805	F-9
		D806	F-12
		D807	F-12
		D808	E-11

TR

Q001	E-2	D601	I-2
Q002	E-3	D603	A-7
Q003	E-1	D604	A-7
Q004	F-2	D605	C-8
Q005	C-2	D606	C-8
Q006	C-1	D607	B-8
Q007	H-2	D608	C-9
Q008	H-2	D609	B-8
Q009	D-3	D610	C-5
Q010	A-2	D611	E-7
Q251	G-5	D612	B-5
Q261	E-5	D613	A-6
Q271	D-6	D614	A-6
Q502	H-7	D616	E-6
Q505	F-7	D617	B-7
Q506	F-7	D618	E-6
Q507	J-6	D619	B-8
Q598	I-2	D620	E-6
Q601	B-4	D621	B-8
Q602	C-10	D622	E-6
Q603	B-5	D623	B-5
Q604	A-7	D630	E-7
Q605	E-7	D801	G-10
Q606	D-5	D802	H-12
Q607	D-6	D803	I-13
Q608	D-6	D804	F-9
Q609	C-5	D805	F-9
Q801	J-6	D806	F-12
Q804	G-13	D807	F-12
Q805	G-9	D808	E-11

D**VR**

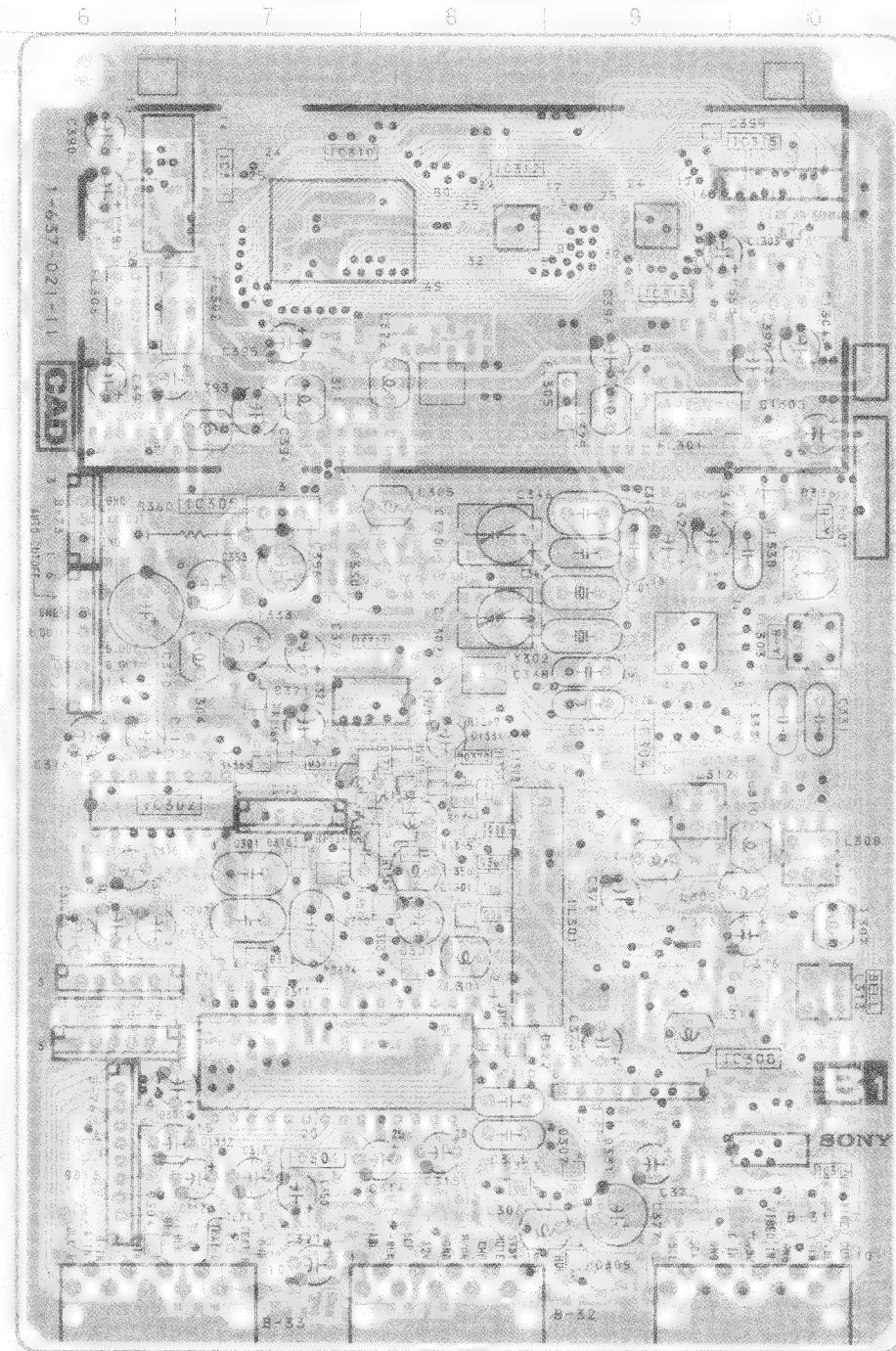
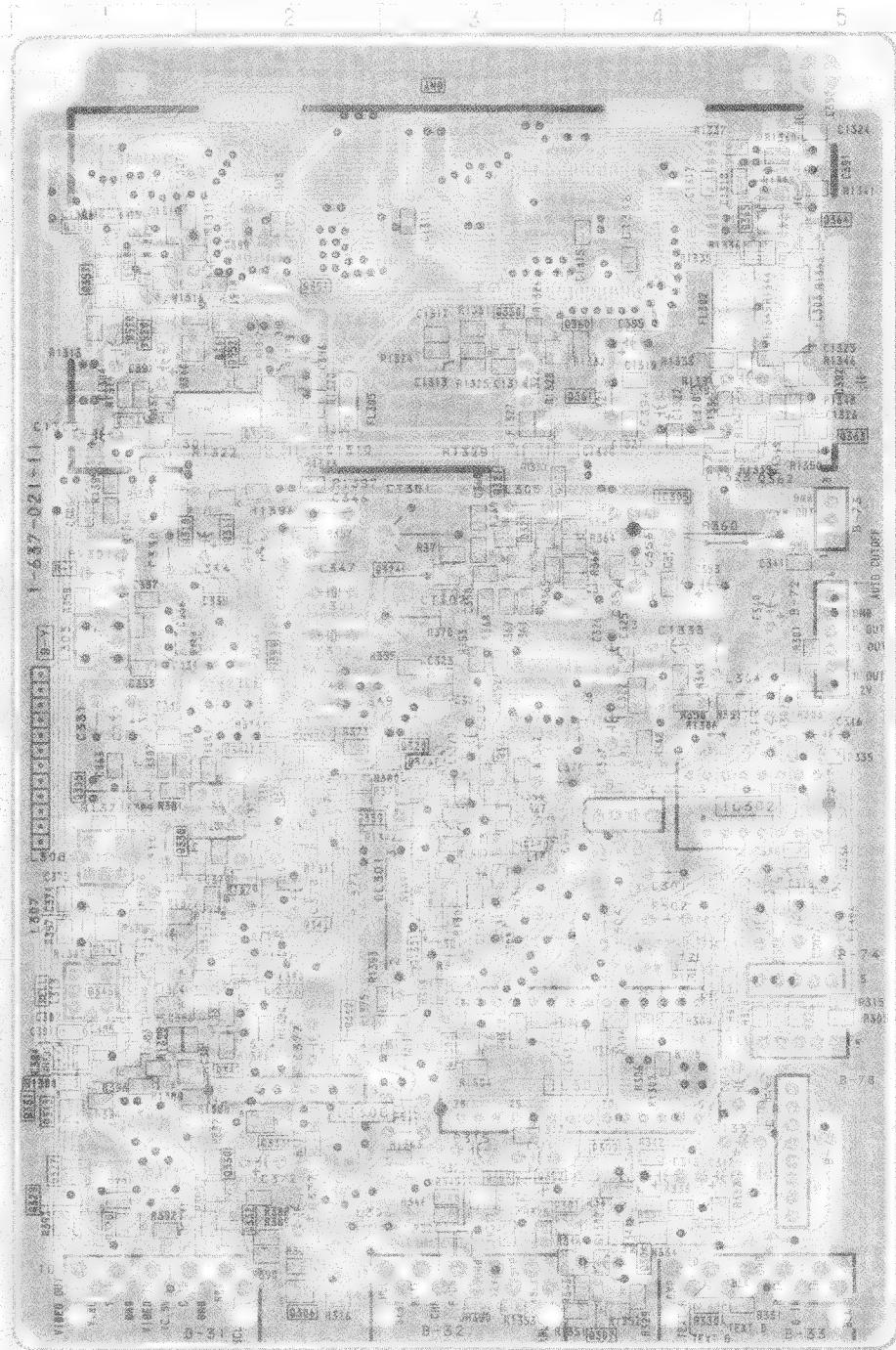
D003	B-3	RV501	G-6
D005	I-2	RV502	I-8
D006	G-1	RV601	A-8
D007	B-2		
D009	F-1		

-D BOARD-

B1

VIDEO PROCESSOR, COLOR PROCESSOR,
Y/C SW. D/A CONVERTER, MEMORY,
A/D CONVERTER

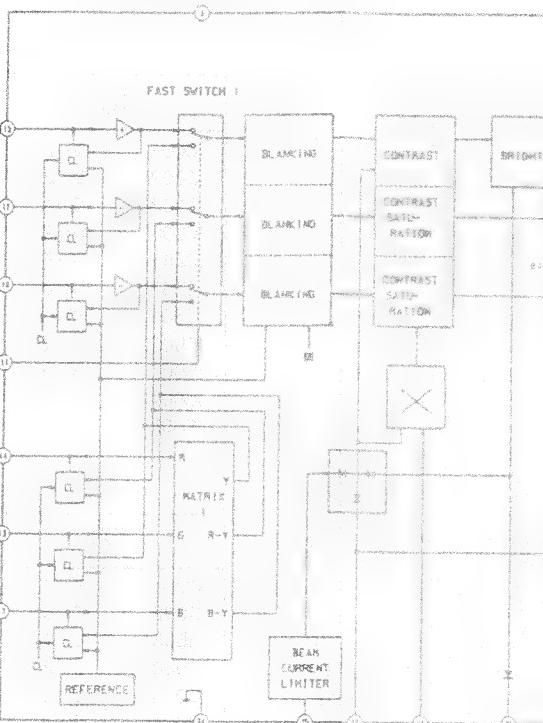
— B1 BOARD —



Note :

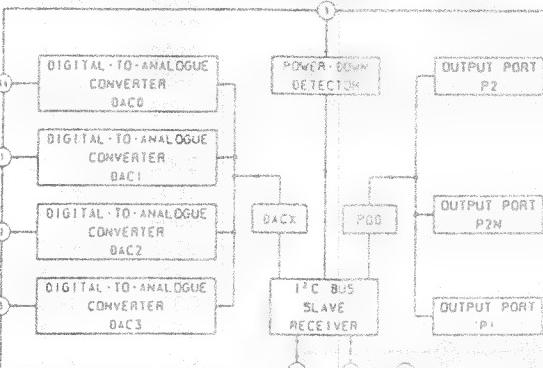
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

B1 BOARD IC301 TDA4580-V4



IC	Q353	B-1
IC301	F-7	B-1
IC302	E-6	C-2
IC303	D-8	C-1
IC304	D-9	B-1
IC305	C-7	B-1
IC306	G-10	B-3
IC308	F-9	C-4
IC310	A-7	C-5
IC311	A-7	C-5
IC312	B-8	B-5
IC313	B-9	A-5
IC315	A-10	D-3
TR	Q367	E-8
	Q368	E-8
	Q369	E-8
	Q370	E-8
	Q371	D-8
	Q372	D-8
	Q373	D-8
	Q1301	E-3
	Q1302	E-3
	Q1303	F-3
D	D301	F-8
	D304	G-6
	D305	F-6
	D307	G-9
	D308	F-8
	D309	G-9
	D310	E-7
	D311	F-7
	D312	E-7
	D314	F-7
	D318	E-7
	D319	E-7
	D320	E-8
	D321	D-7
	D322	F-8
	D330	D-7
	D331	F-9
	D333	E-9
	D336	C-10
	D340	B-1
	D341	B-2
VR	RV301	C-10
	Q343	F-1
	Q344	F-1
	Q345	F-1
	Q346	E-3
	Q347	F-1
	Q348	F-2
	Q350	B-3
	Q352	B-2

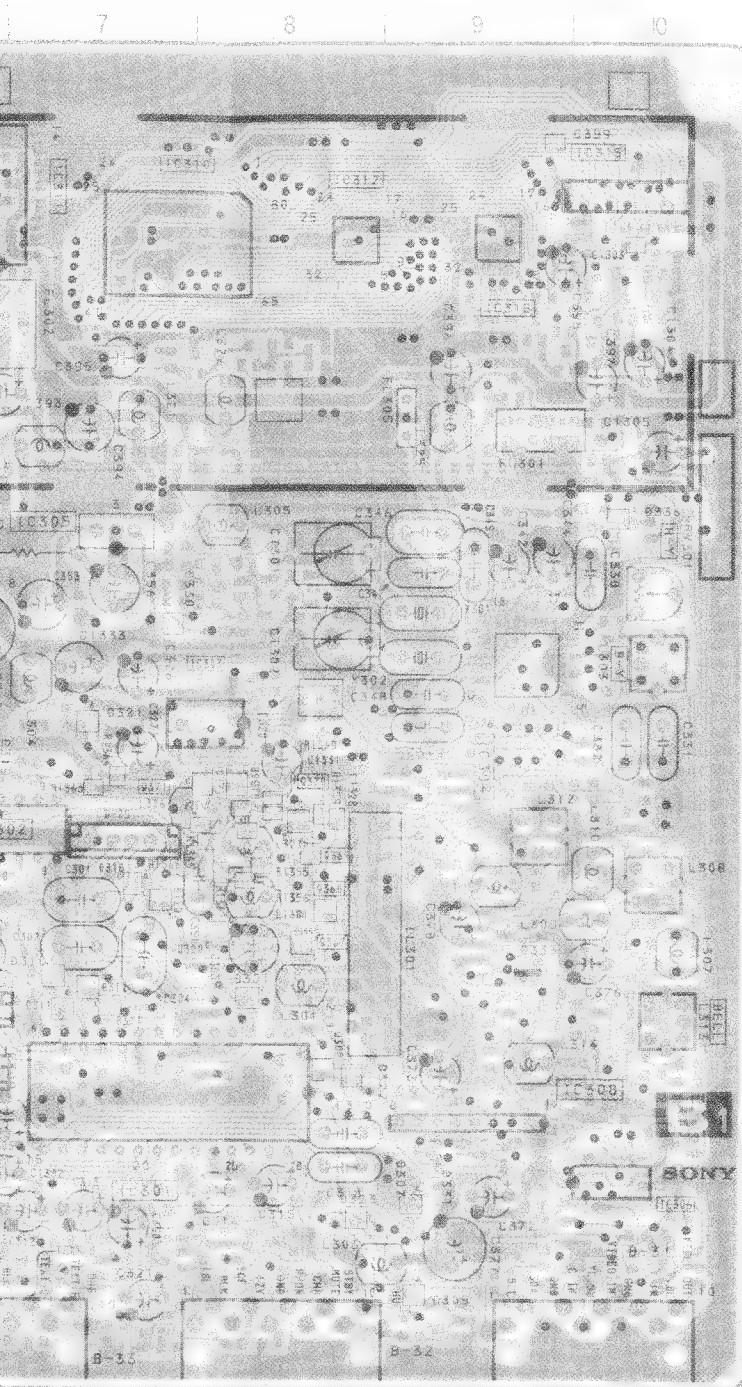
B1 BOARD IC302 TDA8442N3



Note:

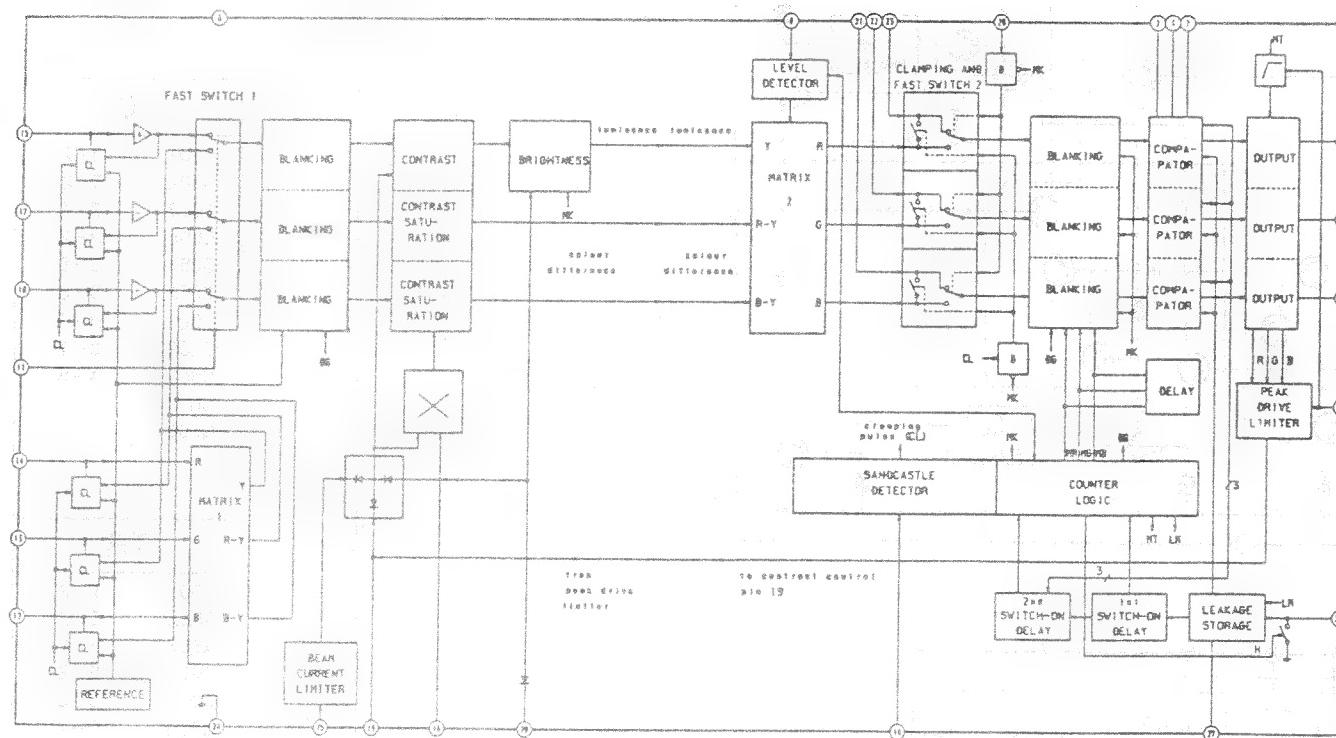
• : Pattern from the side which enables seeing.

• : Pattern of the rear side.

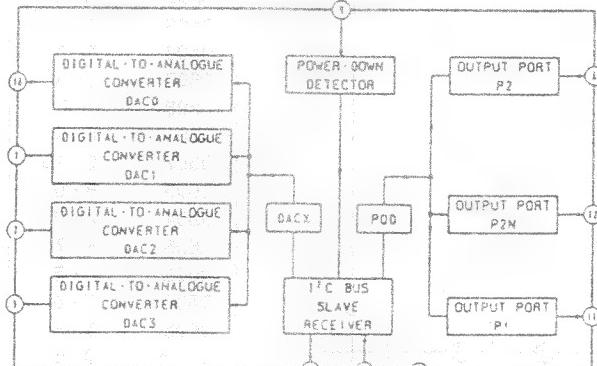


IC	Q353	B-1
IC301	F-7	
IC302	E-6	C-2
IC303	D-8	B-1
IC304	D-9	B-1
IC305	C-7	B-1
IC306	G-10	B-3
IC308	F-9	C-4
IC310	A-7	C-5
IC311	A-7	C-5
IC312	B-8	B-5
IC313	B-9	A-5
IC315	A-10	D-3
TR	Q367	E-8
Q301	G-3	
Q302	G-3	
Q303	G-3	
Q304	G-4	
Q305	E-4	
Q306	G-2	
Q307	G-4	
Q308	G-4	
Q310	C-1	
Q311	C-2	
D	D301	F-8
Q321	C-3	G-6
Q322	C-3	F-6
Q323	C-3	G-9
Q324	C-3	F-8
Q327	G-1	G-9
Q328	G-1	E-7
Q329	G-1	F-7
Q330	G-2	E-7
Q331	F-1	F-7
Q332	G-2	E-7
Q333	F-2	E-7
Q334	E-2	E-8
Q335	E-1	D-7
Q336	D-2	F-7
Q337	D-2	D-7
Q338	E-1	F-9
Q339	E-2	E-9
Q340	F-2	C-10
Q341	E-1	B-1
Q342	E-2	B-2
VR	RV301	C-10

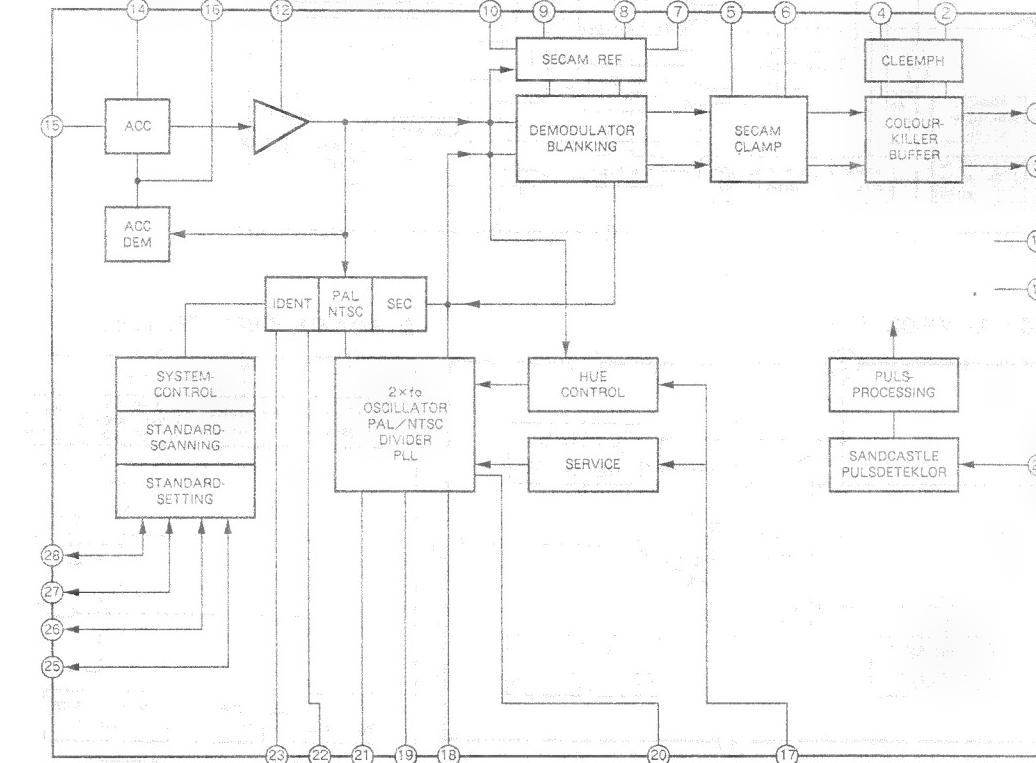
B1 BOARD IC301 TDA4580-V4

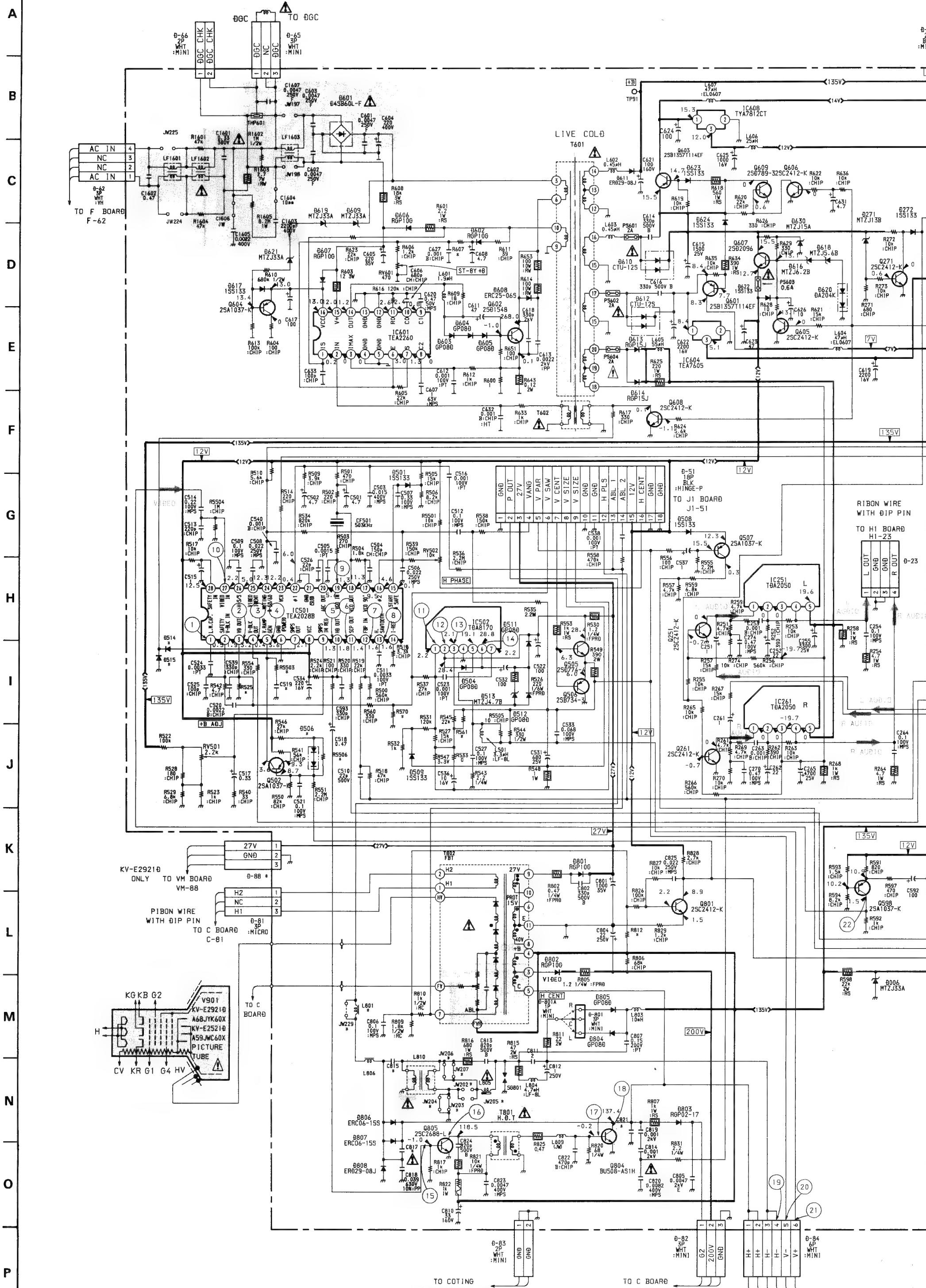


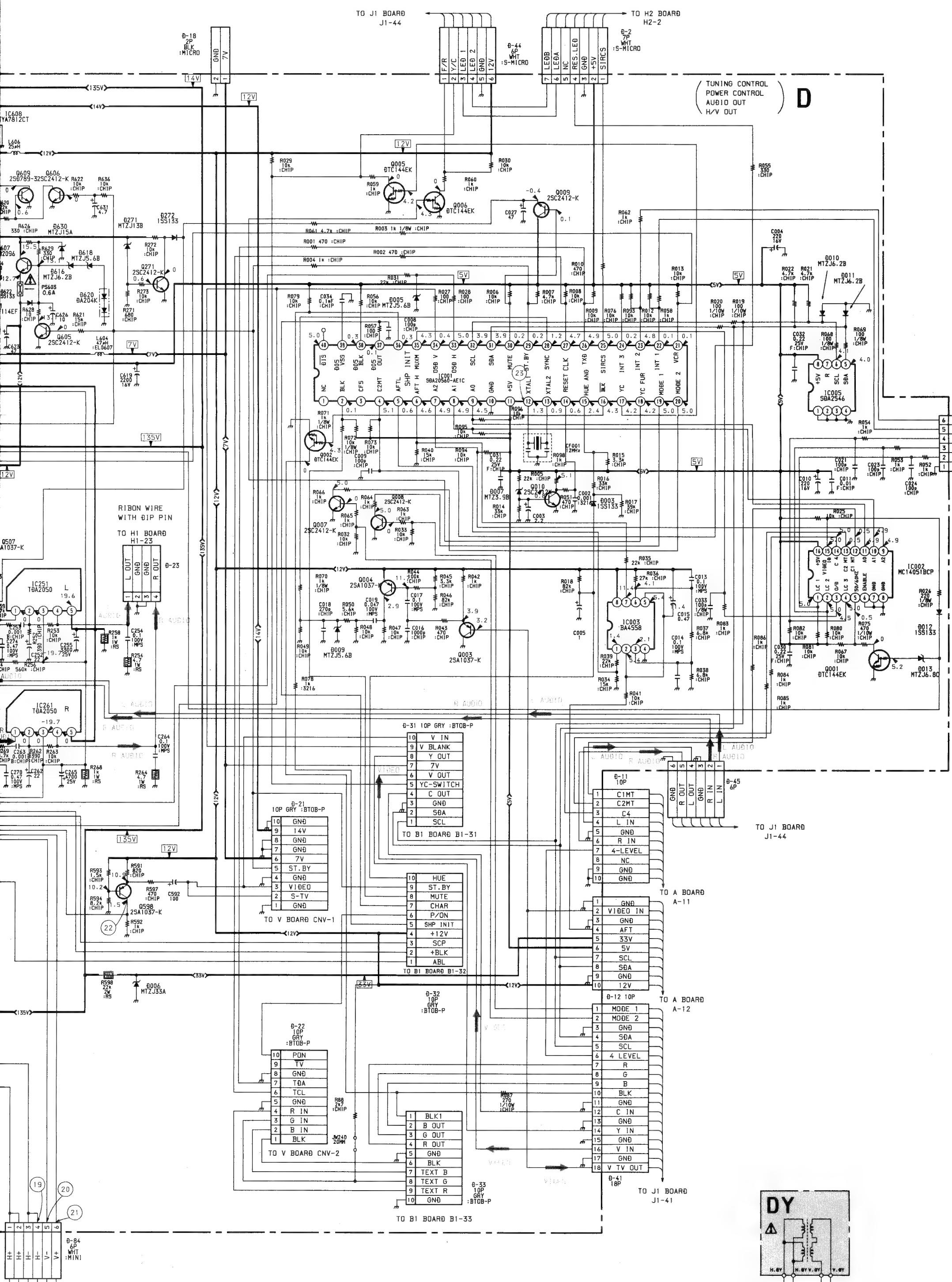
B1 BOARD IC302 TDA8442-N3



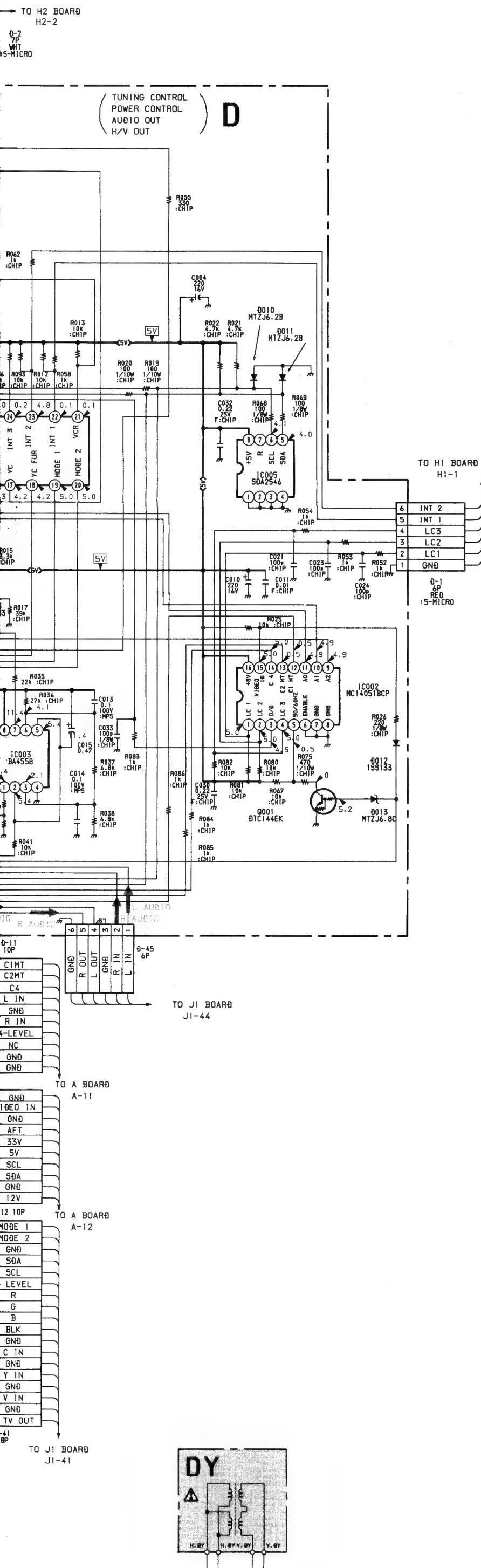
B1 BOARD IC303 TDA4660T



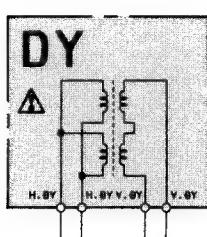




D BOARD



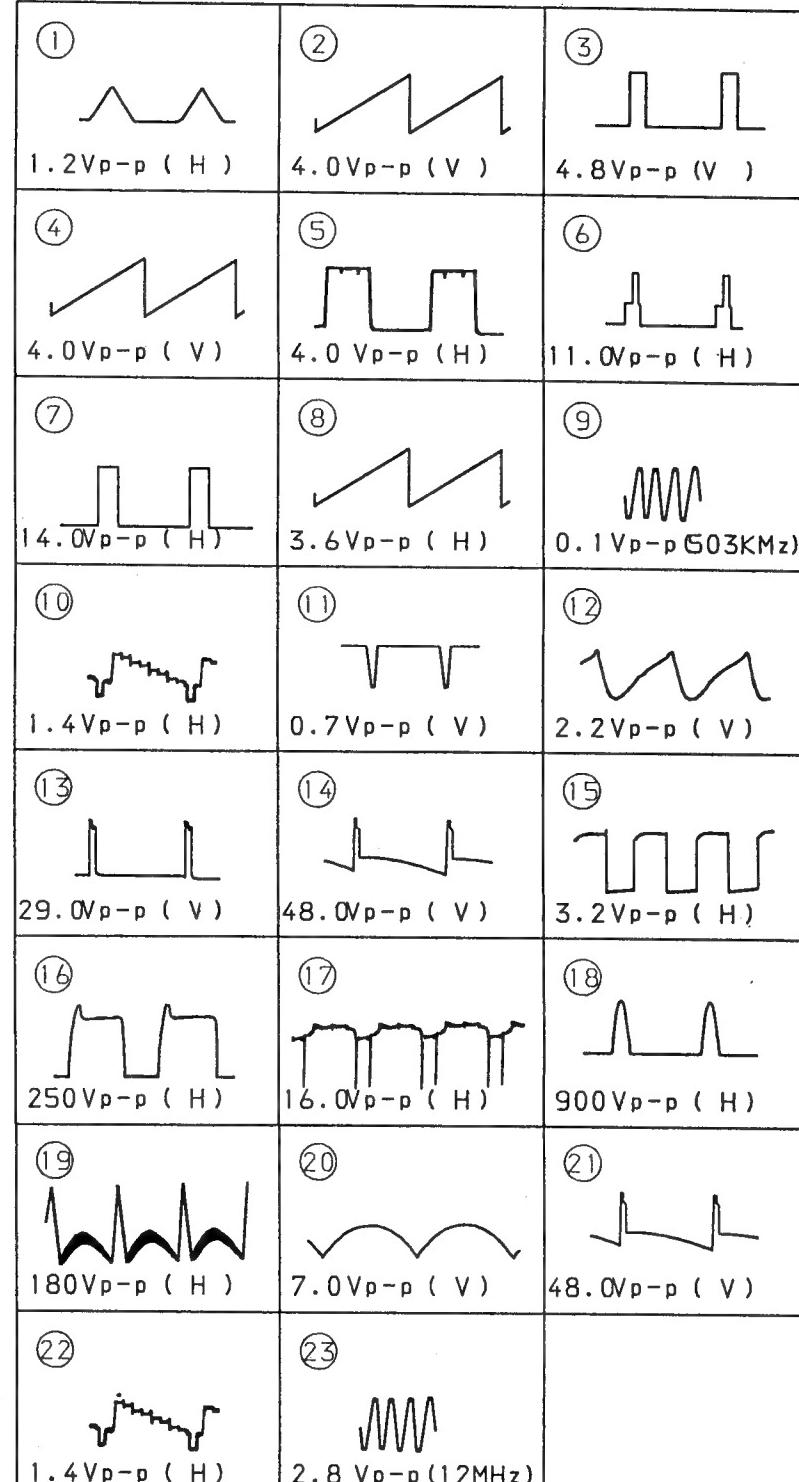
IC001	SDA20560	TUNING CTL
IC002	MC14051BCP	ON SCREEN DISPLAY
IC003	BA4558	AFT COMPARE
IC005	SDA2546	MY MEMORY
IC251	TDA2050	AUDIO OUT (L)
IC261	TDA2050	AUDIO OUT (R)
IC501	TEA2028B	DEFLECTION PROCESSOR
IC502	TDA8170	V OUT
IC601	TEA2260	PRIMARY SMRS CTL
IC604	TEA7605	+5V REG
IC608	TYA7812CT	+12V REG
Q001	DTC144EK	50/60Hz SW
Q002	DTC144EK	REG SW
Q003	2SA1037-K	SYNC SEPARATOR
Q004	2SA1037-K	SYNC SEPARATOR
Q005	DTC144EK	Y/C SW
Q006	DTC144EK	FRONT/REAR SW
Q007	2SC2412-K	MODE 2 SWITCH
Q008	2SC2412-K	MODE 1 SWITCH
Q009	2SC2412-K	MUTE SW
Q010	2SC2412-K	RESET
Q251	2SC2412-K	AUDIO MUTO
Q261	2SC2412-K	AUDIO MUTO
Q271	2SC2412-K	VOLTAGE DETECT
Q502	2SA1037-K	CONSTANT CURRENT SOURCE
Q505	2SD774	V CENT
Q506	2SB734	V CENT
Q507	2SA1037-K	CANAL +BLK
Q598	2SA1037-K	VIDEO AMP
Q601	2SB1357T114EF	STBY SW
Q602	SD1545	REG OUT
Q603	2SB1357T114EF	STBY SW
Q604	2SA1037-K	FAST ON/OFF
Q605	2SC2412-K	STBY SW
Q606	2SC2412-K	STBY SW
Q607	2SD2096-EF	+12V REG
Q608	2SC2412-K	STBY SW
Q609	2SD789-3	STBY SW
Q801	2SC2412-K	ABL AMP
Q804	BU508	H OUT
Q805	2SC2688	H DRIVER
Q003	ISS133	HUE CTL
Q005	MTZJ5.6B	PROT
Q006	MTZJ33A	VC VOLTAGE REGULATION
Q007	MTZJ3.9B	PLOT RESET
Q009	MTZJ5.6B	CLIPPING SYNC LEVEL
Q010	MTZJ6.2B	PROT
Q011	MTZJ6.2B	PROT
Q012	ISS133	PROT
Q013	MTZJ6.8C	PROT
Q021	MTZJ13B	VOLTAGE DETECT
Q022	ISS133	DECOUPLING MUTE AUDIO
Q501	ISS133	START
Q504	GP080PKG23	V PULSE OUT
Q506	DA204K	CURRENT (KV-E2521B ONLY)
Q508	ISS133	CANAL +BLK LEVEL
Q509	ISS133	V LIN
Q511	GP080PKG23	PROT
Q512	GP080PKG23	PROT
Q513	MTZJ4.7B	PROT
Q514	ISS133	PROT (KV-E2921B ONLY)
Q515	ISS133	PROT (KV-E2921B ONLY)
Q601	D4SB60L-F	AC RECT
Q602	RGP10PKG23	REF RECT
Q603	GP080PKG23	SMPS DRIVE 1
Q604	GP080PKG23	SMPS DRIVE 2
Q605	GP080PKG23	SMPS DRIVE 3
Q606	RGP10PKG23	+12V RECT
Q607	RGP10PKG23	REF RECT
Q608	ERC25-06S	PLUSE CLIPPER
Q609	MTZJ33A	FAST ON/OFF
Q610	CTU-12S	+14V RECT
Q611	ER029-08J	+135VRECT
Q612	CTU-12S	+7V RECT
Q613	RGP15JPKG23	AF V RECT-1
Q614	RGP15JPKG23	AF V RECT-2
Q616	MTZJ6.2B	+12V REG
Q617	ISS133	PROT
Q618	MTZJ5.6B	+12V REF
Q619	MTZJ33A	FAST ON/OFF-2
Q620	DA204K	+12V REF
Q621	MTZJ33A	FAST ON/OFF-3
Q622	ISS133	PROT
Q623	ISS133	DECOUPLING STBY
Q624	ISS133	DECOUPLING DTBY
Q630	MTZJ15A	+12V REF
Q801	RGP10PKG23	+27V REF
Q802	RGP10PKG23	+200V REF
Q803	RGP02-17	G2 REF
Q804	GP080PKG23	H CENTER-1
Q805	GP080PKG23	H CENTER-2
Q806	ERC06-15S	H DAMPER-1
Q807	ERC06-15S	H DAMPER-2
Q808	ER029-08J	PIN DAMPER



BOARD

A20560	TUNING CTL
14051BCP	ON SCREEN DISPLAY
4558	AFT CONPARATORE
A2546	MY MEMORY
A2050	AUDIO OUT (L)
A2050	AUDIO OUT (R)
A2028B	DEFLECTION PROCESSOR
A8170	V OUT
A2260	PRIMARY SMRS CTL
A7605	+5V REG
A7812CT	+12V REG
C144EK	50/60Hz SW
A144EK	REG SW
A1037-K	SYNC SEPARATOR
A1037-K	SYNC SEPARATOR
C144EK	Y/C SW
C144EK	FRONT/REAR SW
C2412-K	MODE 2 SWITCH
C2412-K	MODE 1 SWITCH
C2412-K	MUTE SW
C2412-K	RESET
C2412-K	AUDIO MUTO
C2412-K	AUDIO MUTO
C2412-K	VOLTAGE DETECT
A1037-K	CONSTANT CURRENT SOURCE
D774	V CENT
B734	V CENT
A1037-K	CANAL +BLK
A1037-K	VIDEO AMP
B1357T114EF	STBY SW
1545	REG OUT
B1357T114EF	STBY SW
A1037-K	FAST ON/OFF
C2412-K	STBY SW
C2412-K	STBY SW
D2096-EF	+12V REG
C2412K	STBY SW
D789-3	STBY SW
C2412-K	ABL AMP
508	H OUT
C2688	H DRIVER
SS133	HUE CTL
TZJ5.6B	PROT
TZJ33A	VC VOLTAGE REGULATION
TZJ3.9B	PLOT RESET
TZJ5.6B	CLIPPING SYNC LEVEL
TZJ6.2B	PROT
TZJ6.2B	PROT
SS133	PROT
TZJ6.8C	PROT
TZJ13B	VOLTAGE DETECT
SS133	DECOUPLING MUTE AUDIO
SS133	START
P080PKG23	V PULSE OUT
A204K	CURRENT (KV-E2521D ONLY)
SS133	CANAL +BLK LEVEL
SS133	V LIN
P080PKG23	PROT
P080PKG23	PROT
TZJ4.7B	PROT
SS133	PROT (KV-E2921D ONLY)
SS133	PROT (KV-E2921D ONLY)
4SB60L-F	AC RECT
GP10GPKG23	REF RECT
P080PKG23	SMPS DRIVE 1
P080PKG23	SMPS DRIVE 2
P080PKG23	SMPS DRIVE 3
GP10GPKG23	+12V RECT
GP10GPKG23	REF RECT
RC25-065	PLUSE CLIPPER
TZJ33A	FAST ON/OFF
TU-12S	+14V RECT
R029-08J	+135VRECT
TU-12S	+7V RECT
GP15JPKG23	AF V RECT-1
GP15JPKG23	AF V RECT-2
TZJ6.2B	+12V REG
SS133	PROT
TZJ5.6B	+12V REF
TZJ33A	FAST ON/OFF-2
A204K	+12V REF
TZJ33A	FAST ON/OFF-3
SS133	PROT
SS133	DECOUPLING STBY
SS133	DECOUPLING BTBY
TZJ15A	+12V REF
GP10GPKG23	+27V REF
GP10GPKG23	+200V REF
G02-17	G2 REF
P080PKG23	H CENTER-1
P080PKG23	H CENTER-2
RC06-15S	H DAMPER-1
RC06-15S	H DAMPER-2
R029-08J	PIN DAMPER

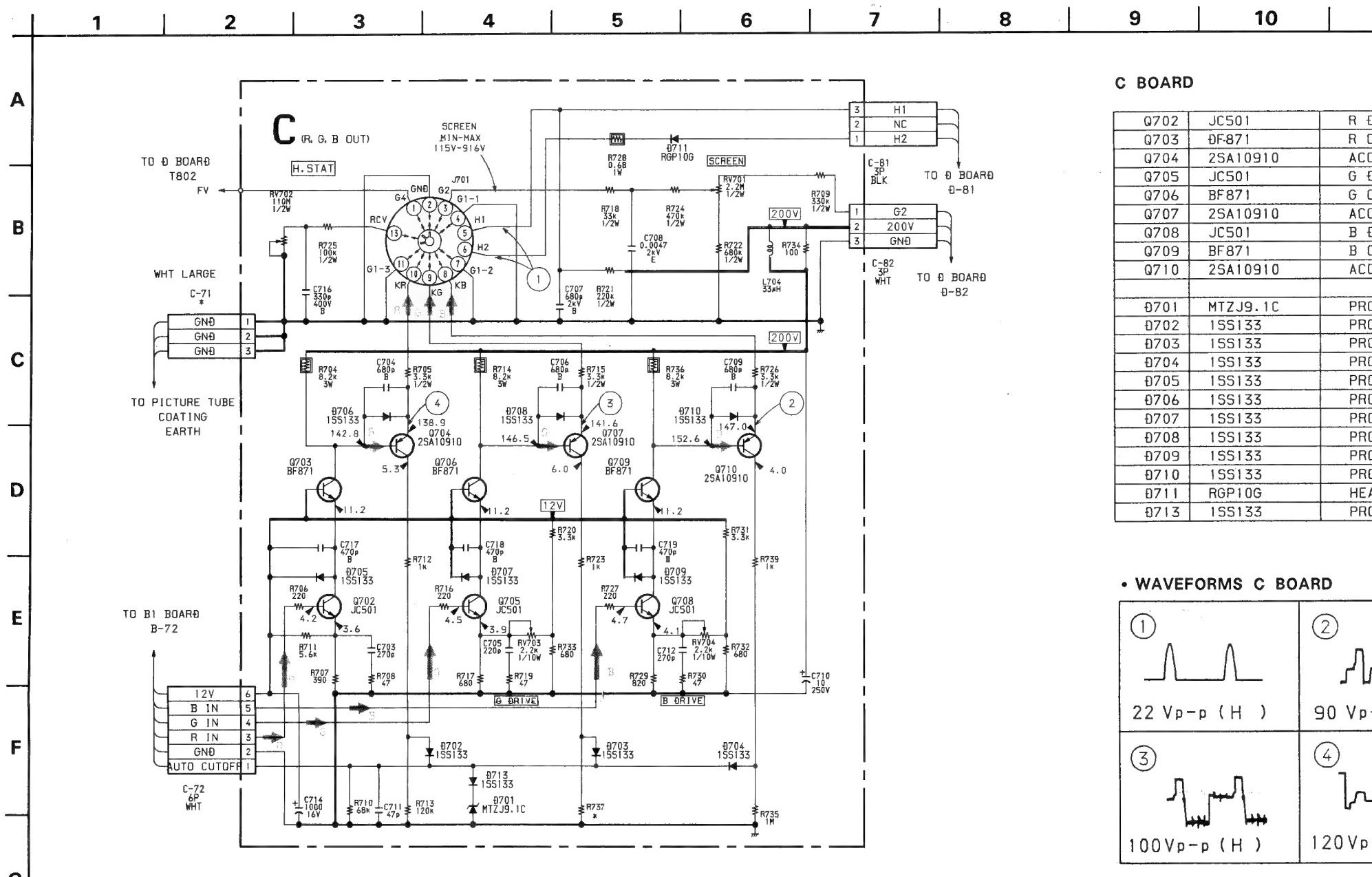
• WAVEFORMS D BOARD



D BOARD *MARK

	KV-E2521D	KV-E2921D
C519	0.47MF	0.33MF
C815	1MF	0.82MF
C817	0.015MF	0.017MF
C821	680P 2K	470P 2K
D506	DA204K	-
D514	JW	ISS133
D515	-	ISS133
D-88	-	3P
JW202	-	X
JW203	X	-
JW204	X	-
JW205	-	X
JW206	X	-
JW207	X	-
JW229	X	-
JW216	X	-
L801	-	3.9MMH
R525	1K	-
R561	-	270K
R570	-	680
R607	4.7K	5.6K
R812	68K	51K
R5503	4.7	10
R5506	-	12K

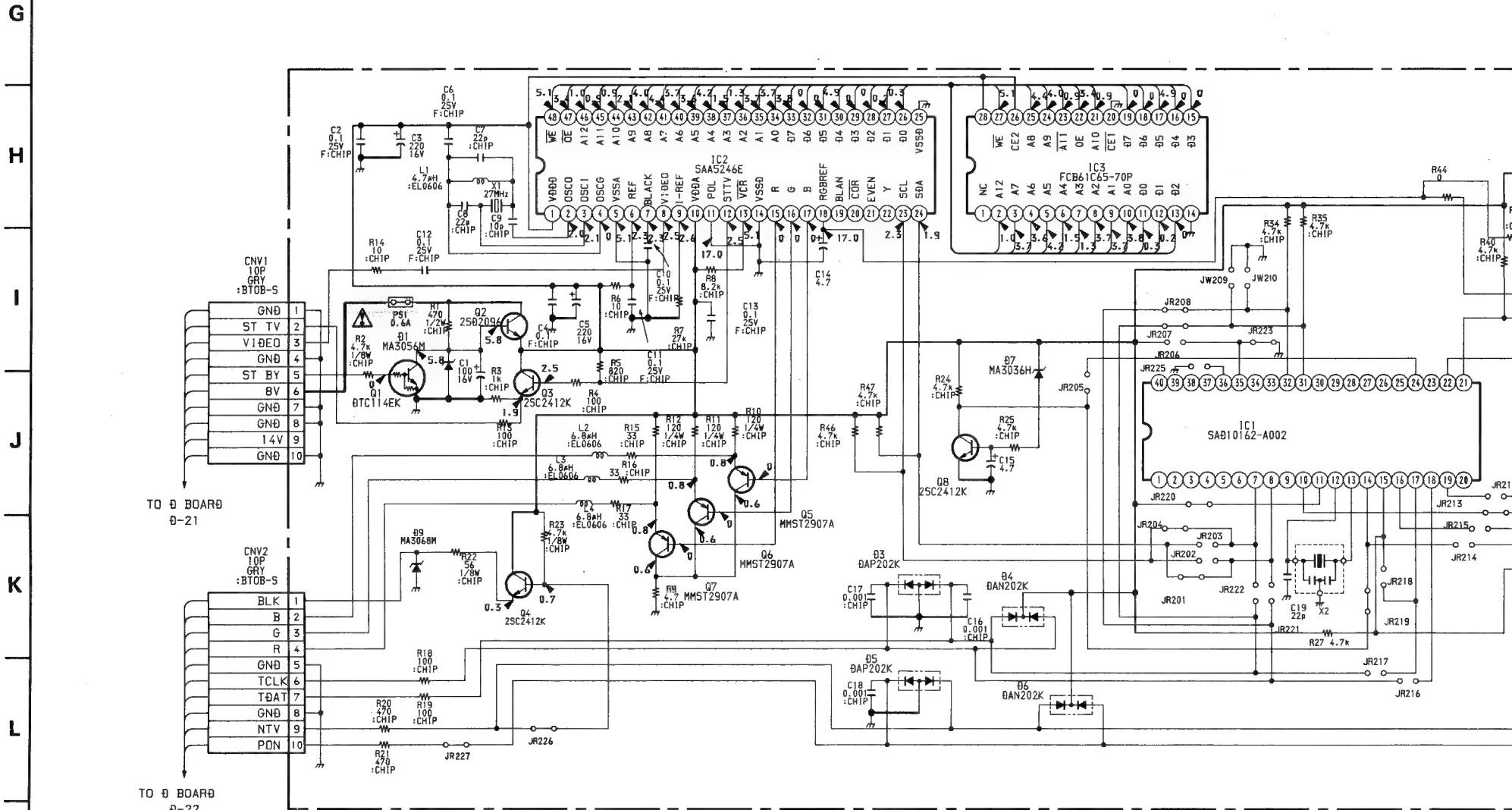
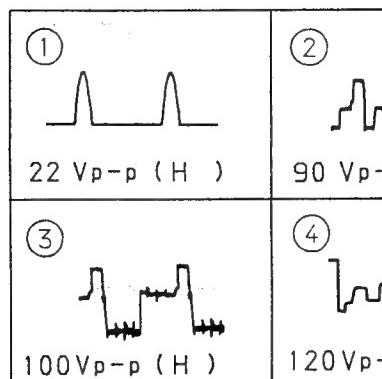
— NOT MOUNTED
X TO BE MOUNTED



C BOARD

Q702	JC501	R D
Q703	DF-871	R D
Q704	2SA10910	ACO
Q705	JC501	G D
Q706	BF871	G O
Q707	2SA10910	ACO
Q708	JC501	B D
Q709	BF871	B O
Q710	2SA10910	ACO
0701	MTZJ9.1C	PRO
0702	ISS133	PRO
0703	ISS133	PRO
0704	ISS133	PRO
0705	ISS133	PRO
0706	ISS133	PRO
0707	ISS133	PRO
0708	ISS133	PRO
0709	ISS133	PRO
0710	ISS133	PRO
0711	RGP10G	HEA
0713	ISS133	PRO

- WAVEFORMS C BOARD



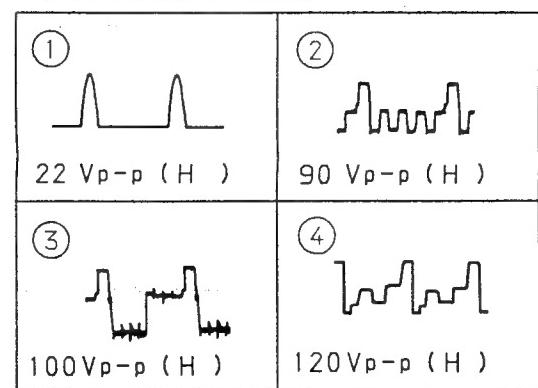
V BOARD

IC1	S9A20162-A002	MICRO-CONT
IC2	SAA5246E	I ^V T
IC3	FCB61C65-70P	STATIC-RAM
Q1	8TC114EK	STANDBY
Q2	2SD2096	5V REG
Q3	2SC2412K	SYNC BUFFER
Q4	2SC2712K	BLK OUT
Q5	MMST2907A	B OUT
Q6	MMST2907A	G OUT
Q7	MMST2907A	R OUT
Q8	2SC2412K	PON SW
D1	MA3056M	5V REG
D3	8AP202K	PROTECT
D4	8AN202K	PROTECT
D5	8AP202K	PROTECT
D6	8AN202K	PROTECT
D7	MA3036H	PROTECT
D9	MA3068M	PROTECT

C BOARD

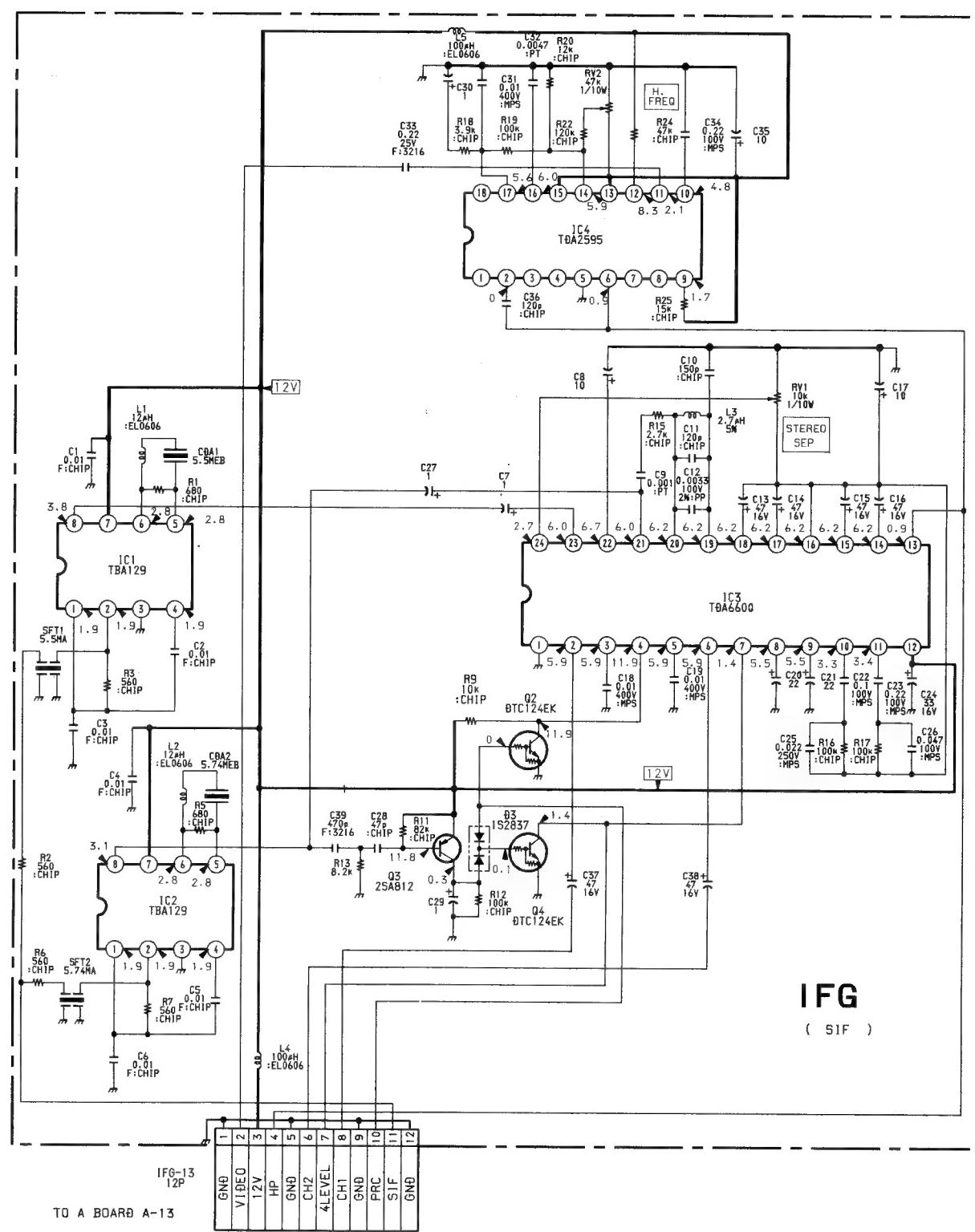
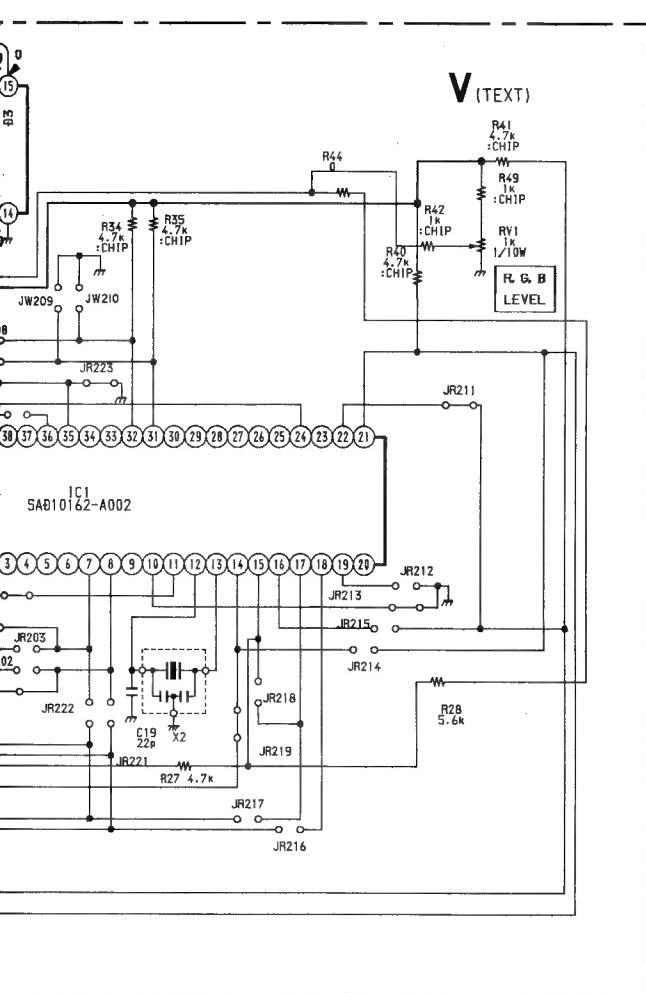
Q702	JC501	R DRIVE
Q703	DF871	R OUT
Q704	2SA10910	ACO MEASURING
Q705	JC501	G DRIVE
Q706	BF871	G OUT
Q707	2SA10910	ACO MEASURING
Q708	JC501	B DRIVE
Q709	BF871	B OUT
Q710	2SA10910	ACO MEASURING
Q701	MTZJ9.1C	PROTECT
Q702	ISS133	PROTECT
Q703	ISS133	PROTECT
Q704	ISS133	PROTECT
Q705	ISS133	PROTECT
Q706	ISS133	PROTECT
Q707	ISS133	PROTECT
Q708	ISS133	PROTECT
Q709	ISS133	PROTECT
Q710	ISS133	PROTECT
Q711	RGP10G	HEATING VOLTAGE REC
Q713	ISS133	PROTECT

- WAVEFORMS C BOARD



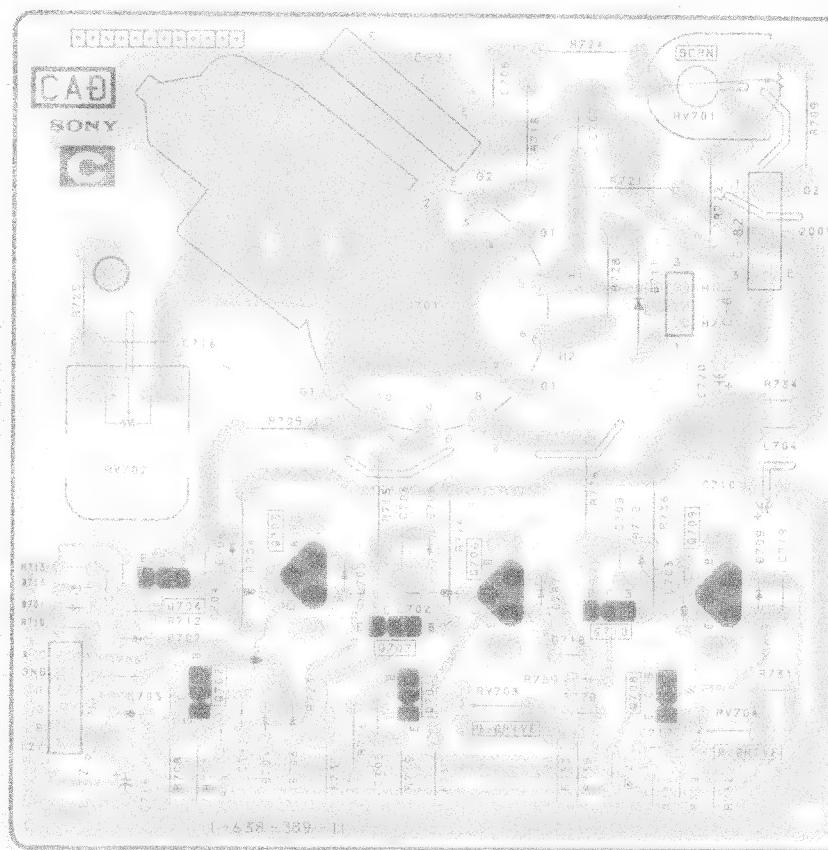
C BOARD *MARK

	KV-E2521Ø	KV-E2921Ø
C-71	2P	3P
R737	820K	470K

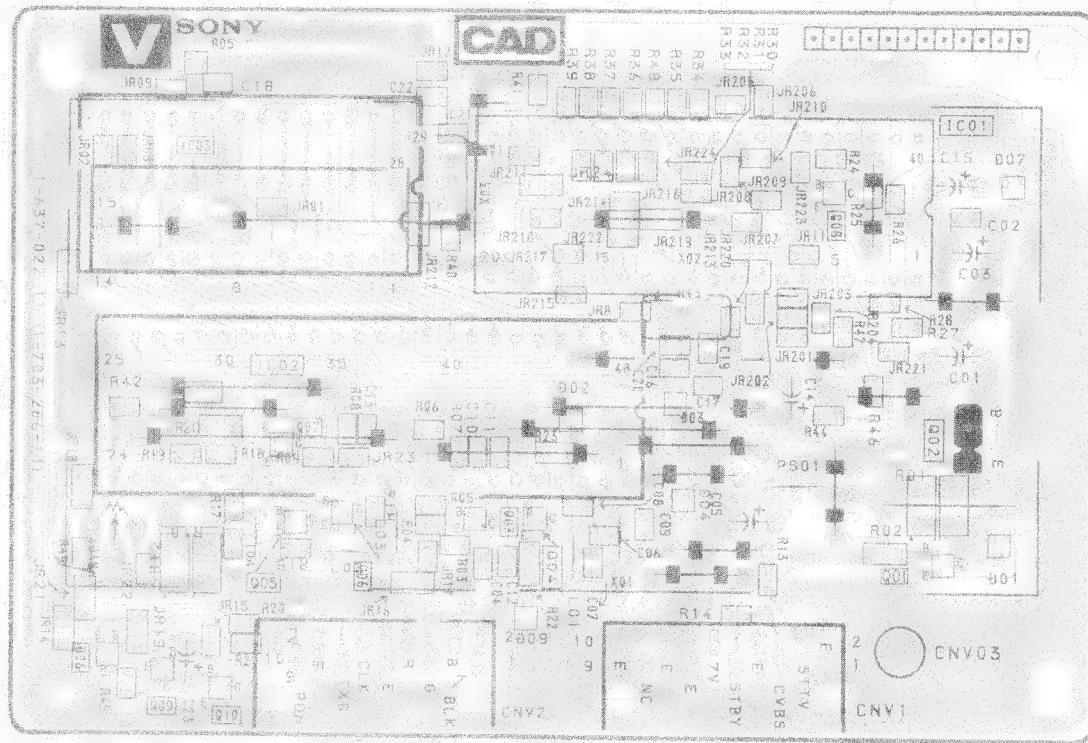
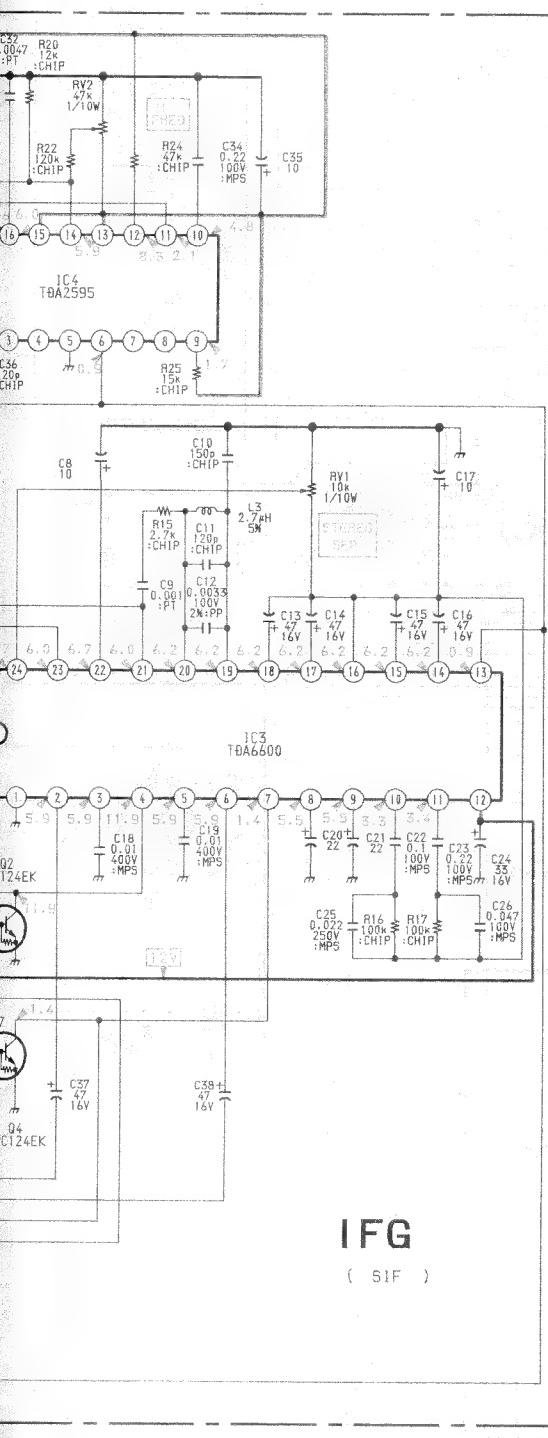


C [R. G. B OUT] **V** [TEXT] **IFG** [SIP]

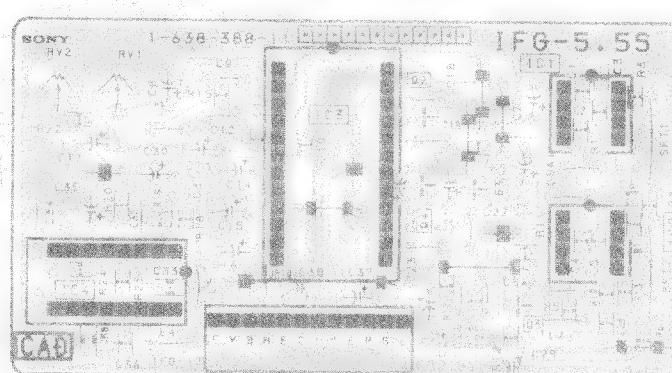
- C BOARD -



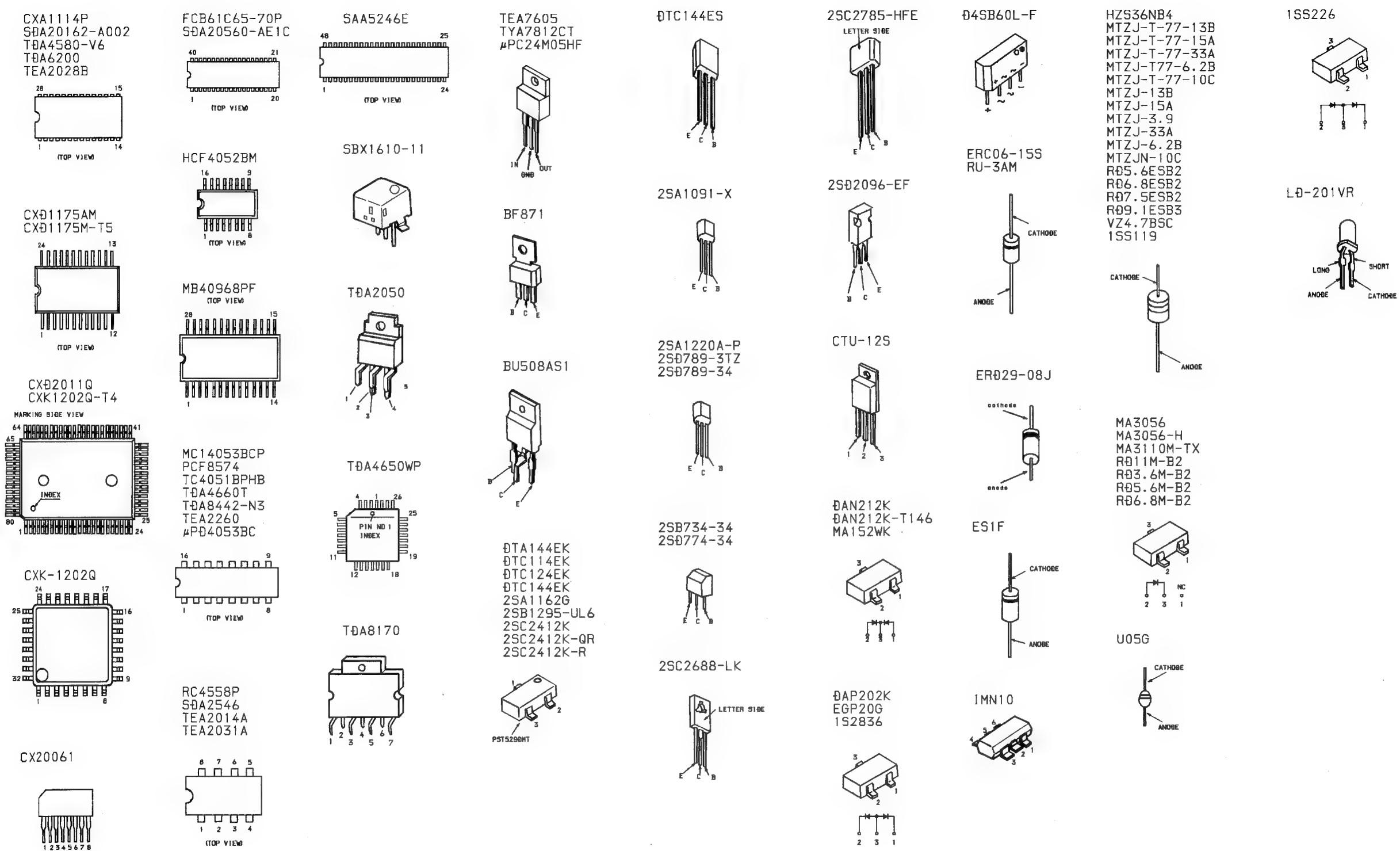
- V BOARD -



-1FG BOARD-



5-4. SEMICONDUCTORS



SECTION 6

EXPLODED VIEWS

NOTE:

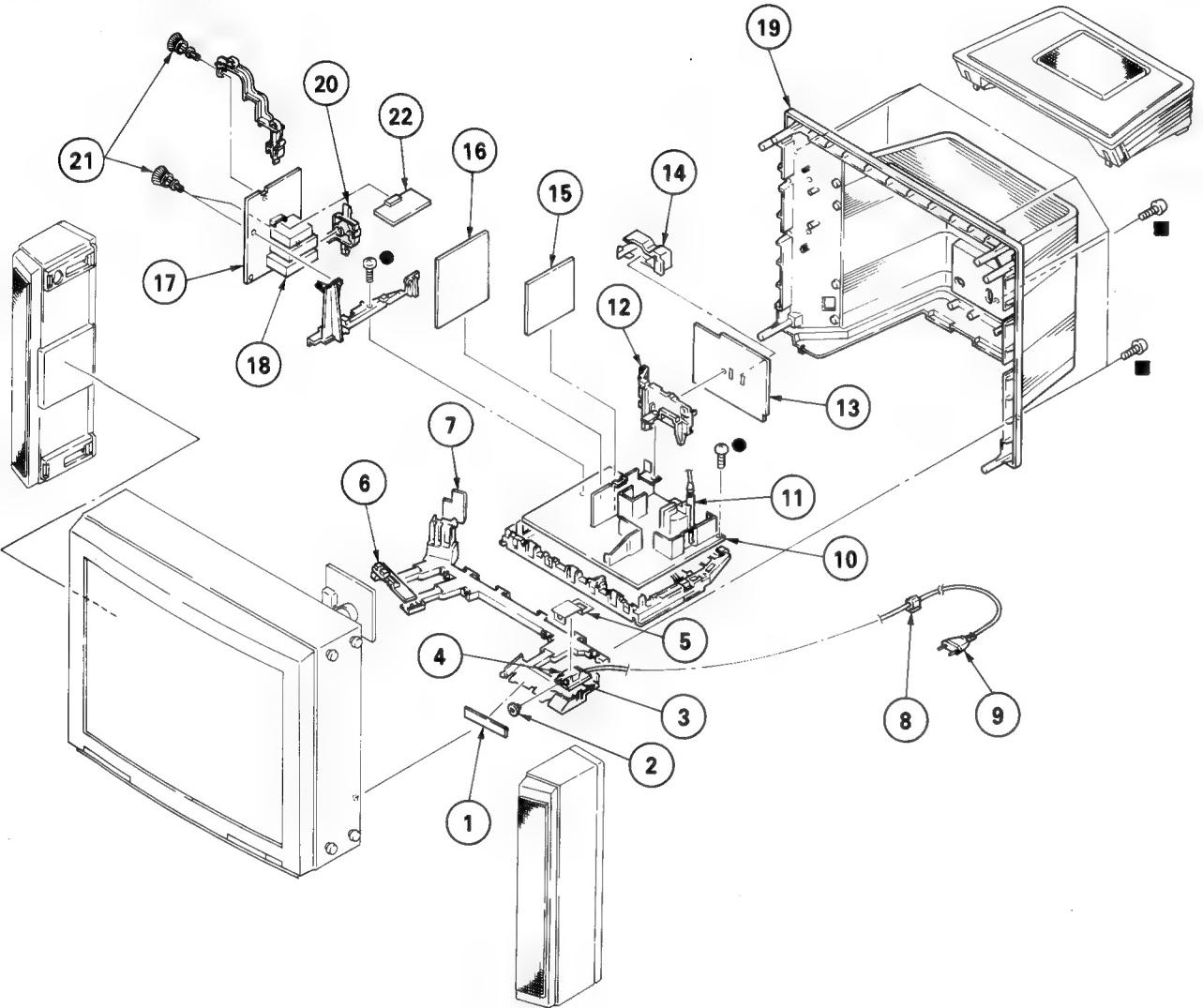
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

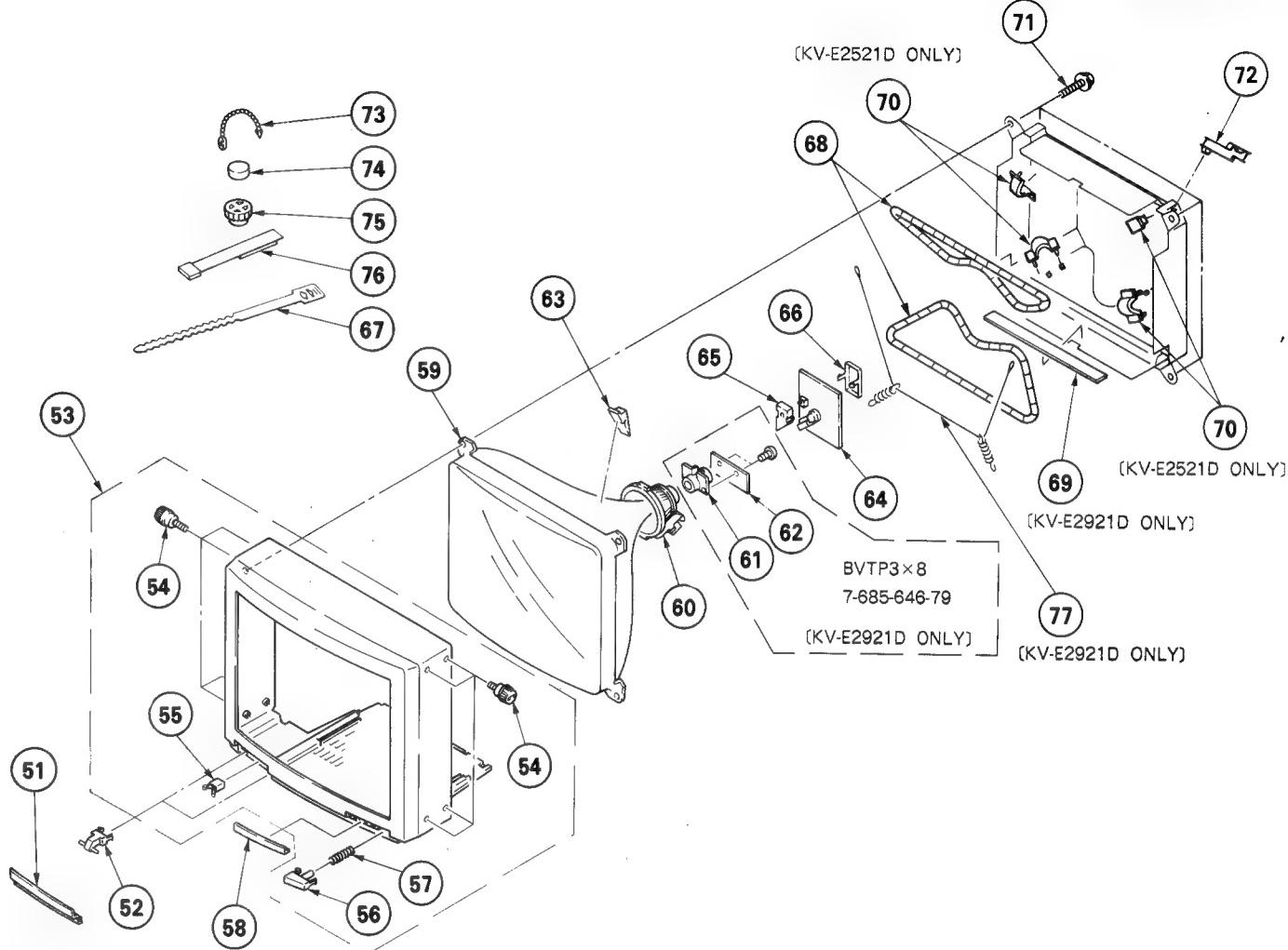
The components identified by shading and mark A are critical for safety.
Replace only with part number specified.

(1) CHASSIS

- : BVTP3×12 7-685-648-79
■ : BVTP4×16 7-685-663-79



(2) PICTURE TUBE

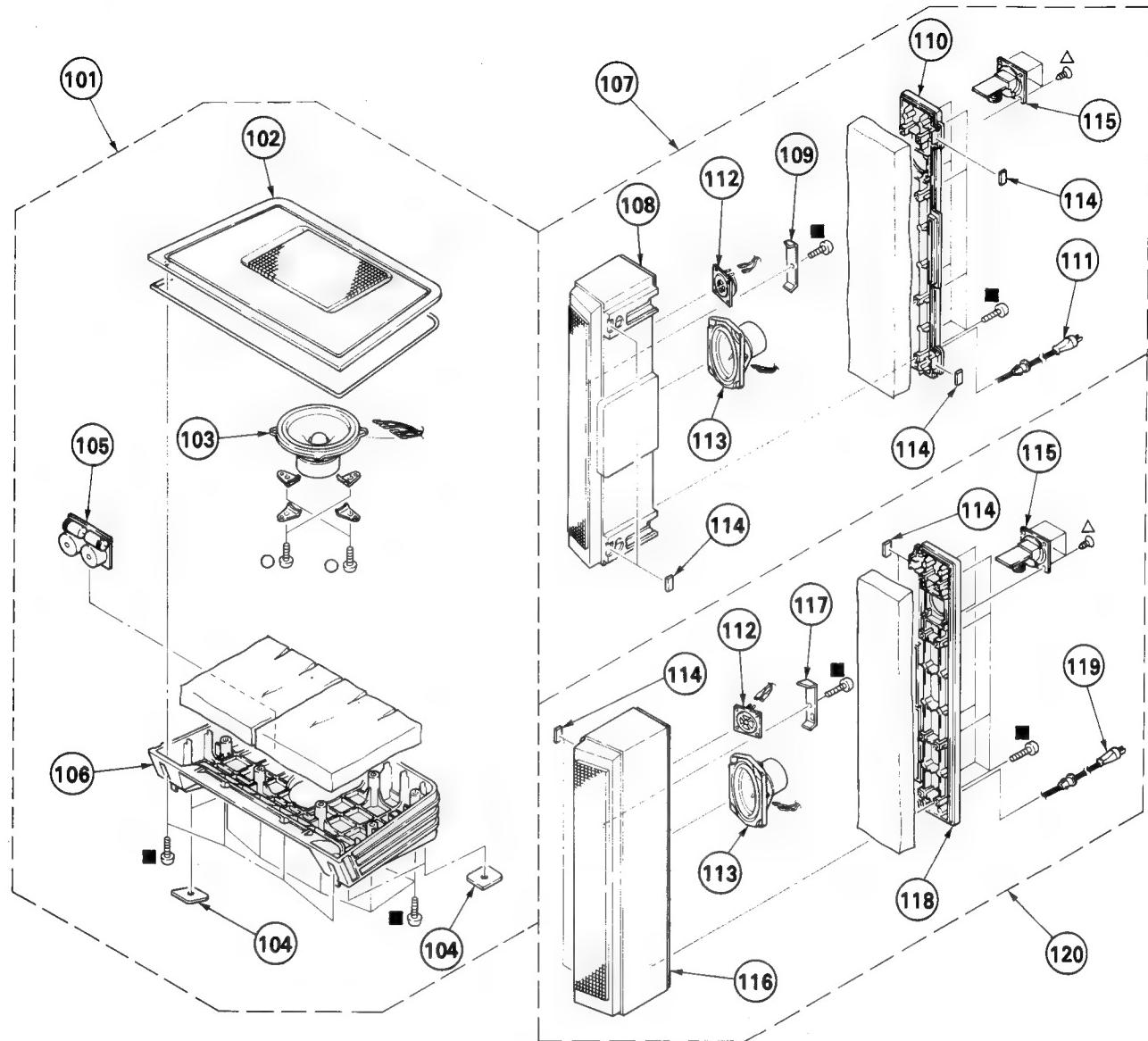


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	*1-638-392-11	H2 BOARD		12	*4-386-624-11	BRACKET, J	
2	4-201-011-01	CAP, SWITCH (KV-E2521D ONLY)		13	A-1651-018-A	J1 BOARD, COMPLETE (KV-E2521D ONLY)	
	4-386-611-01	COVER, SWITCH (KV-E2921D ONLY)			A-1651-020-A	J1 BOARD, COMPLETE (KV-E2921D ONLY)	
3	*1-638-390-11	F BOARD		14	4-200-014-01	BRACKET, TERMINAL	
4	▲1-571-433-11	SWITCH, PUSH (AC POWER)		15	A-1645-013-A	V BOARD, COMPLETE	
5	4-200-274-01	COVER, POWER SWITCH		16	A-1621-013-A	B1 BOARD, COMPLETE (KV-E2521D ONLY)	
6	*1-638-391-11	H1 BOARD			A-1621-015-A	B1 BOARD, COMPLETE (KV-E2921D ONLY)	
7	*1-638-393-11	J2 BOARD		17	A-1632-022-A	A BOARD, COMPLETE	
8	▲4-389-201-02	HOLDER, AC CORD		18	▲1-465-301-11	TUNER, ET (UV-816(PLL))	
9	▲1-590-501-11	CORD, POWER(WITH NOISE FILTER)		19	4-201-017-02	COVER, REAR (KV-E2521D ONLY)	
10	A-1642-031-A	D BOARD, COMPLETE (KV-E2521D ONLY)			4-200-026-04	COVER, REAR (KV-E2921D ONLY)	
	A-1642-032-A	D BOARD, COMPLETE (KV-E2921D ONLY)		20	*4-386-617-01	HOLDER, TERMINAL	
11	▲1-439-416-11	TRANSFORMER ASSY, FLYBACK (UX-1600)		21	4-386-618-01	RIVET, T TYPE	
				22	A-1654-004-A	IFG BOARD, COMPLETE	

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4201-006-5	DOOR ASSY, CONTROL (KV-E2521D ONLY)		62	*1-634-193-11	VM BOARD (KV-E2921D ONLY)	
	X-4200-001-5	LID ASSY, CONTROL (KV-E2921D ONLY)		63	3-704-495-01	SPACER, DY	
52	3-703-035-11	SHAFT, LID		64	*A-1638-011-A	C BOARD, COMPLETE (KV-E2521D ONLY)	
53	X-4201-005-5	CABINET ASSY (WITH BEZEL ASSY) 54-57 (KV-E2521D ONLY)			*A-1638-013-A	C BOARD, COMPLETE (KV-E2921D ONLY)	
	X-4200-008-8	CABINET ASSY (WITH BEZEL ASSY) 54-57 (KV-E2921D ONLY)		65	*4-379-167-01	COVER (MAIN), CV	
				66	*4-379-160-01	COVER (REAR LID), CV	
54	X-4374-104-1	SCREW (B) ASSY, ORNAMENTAL		67	3-701-007-00	BAND, BINDING	
55	4-392-036-01	CATCHER, PUSH		68	A 1-460-091-11	COIL, DEGAUSS (KV-E2521D ONLY)	
56	4-200-013-01	BUTTON, POWER			A 1-426-398-11	COIL, DEMAGNETIZATION (KV-E2921D ONLY)	
57	4-329-112-21	SPRING		69	4-389-291-01	CUSHION (KV-E2921D ONLY)	
58	4-200-017-02	WINDOW, ORNAMENTAL		70	*4-385-916-01	HOLDER (D) (KV-E2521D ONLY)	
59	A 8-733-224-05	PICTURE TUBE (A59JWC60X) (KV-E2521D ONLY)		71	4-373-263-01	SCREW (M), PT	
	A 8-733-824-05	PICTURE TUBE (A68JYK60X) (KV-E2921D ONLY)		72	*4-387-216-01	HOLDER, LEAD	
60	A 1-451-311-21	DEFLECTION YOKE (Y25FXA) (KV-E2521D ONLY)		73	4-308-870-00	CLIP, LEAD WIRE	
	A 1-451-313-21	DEFLECTION YOKE (Y29FXA) (KV-E2921D ONLY)		74	1-452-032-00	MAGNET, DISK; 10MM ϕ	
61	A 1-452-509-42	NECK ASSY, PICTURE TUBE (NA-308) (KV-E2921D ONLY)		75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
				76	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
				77	4-369-318-00	SPRING, TENSION (KV-E2921D ONLY)	

(3) SPEAKER

- : BVTP4×16 7-685-663-79
- : BVTP4×10 7-685-660-79
- △ : KTP3×12 7-685-248-19



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
101	*A-1678-001-A	BOX ASSY, WOOFER		102-106	111	1-575-025-11	CORD, SPEAKER (WITH PLUG)
102	X-4200-004-2	BOARD ASSY, BAFFLE			112	1-544-203-11	SPEAKER
103	1-544-192-11	SPEAKER			113	1-544-204-11	SPEAKER
104	4-200-009-01	CUSHION, FOOT			114	4-200-006-01	CUSHION, FOOT
105	1-236-549-11	NETWORK, DIVIDING			115	1-236-510-21	NETWORK, DIVIDING
106	4-200-027-01	BOX, WOOFER			116	X-4201-004-1	BOX ASSY (RIGHT), SIDE (KV-E2521D ONLY)
107	*A-1678-012-A	BOX ASSY (LEFT), SPEAKER (KV-E2521D ONLY)	108-115		117	X-4200-005-1	BOX ASSY (R), SIDE (KV-E2921D ONLY)
					118	*4-200-004-02	BRACKET (R), SPEAKER
					119	4-201-006-01	PANEL (RIGHT), REAR (KV-E2521D ONLY)
					120	4-200-029-01	PANEL (R), REAR (KV-E2921D ONLY)
108	X-4201-003-1	BOX ASSY (LEFT), SIDE (KV-E2521D ONLY)			119	1-575-024-11	CORD, SPEAKER (WITH PLUG)
	X-4200-006-1	BOX ASSY (L), SIDE (KV-E2921D ONLY)			120	*A-1678-010-A	BOX ASSY (RIGHT), SPEAKER (KV-E2521D ONLY)
109	*4-200-003-02	BRACKET (L), SPEAKER					
110	4-201-007-01	PANEL (LEFT), REAR (KV-E2521D ONLY)					
	4-200-030-01	PANEL (L), REAR (KV-E2921D ONLY)					

SECTION 7 ELECTRICAL PARTS LIST

B1

NOTE :-

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

- MF : μF , PF : $\mu\mu\text{F}$
- MMH : mH , UH : μH

RESISTORS

- All resistors are in ohms
 - F : nonflammable

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
A-1621-013-A	B1 BOARD, COMPLETE (KV-E2521D ONLY)					C344	1-124-791-11	ELECT	1MF	20%	50V
	*****					C345	1-137-094-11	FILM	0.047MF	10%	100V
A-1621-015-A	B1 BOARD, COMPLETE (KV-E2921D ONLY)					C346	1-137-033-11	FILM	0.33MF	10%	100V
	*****					C347	1-137-098-11	FILM	0.1MF	10%	100V
*1-565-393-11	CONNECTOR, BOARD TO BOARD					C348	1-137-102-11	FILM	0.022MF	10%	250V
*1-568-878-51	PIN, CONNECTOR 3P (KV-E2921D ONLY)					C349	1-137-102-11	FILM	0.022MF	10%	250V
*1-568-881-51	PIN, CONNECTOR 6P					C350	1-124-902-00	ELECT	0.47MF	20%	50V
	<CAPACITOR>					C351	1-137-102-11	FILM	0.022MF	10%	250V
						C352	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C301	1-137-031-11	FILM	0.22MF	10%	100V	C353	1-126-101-11	ELECT	100MF	20%	16V
C302	1-137-031-11	FILM	0.22MF	10%	100V	C354	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C303	1-124-122-11	ELECT	100MF	20%	50V	C356	1-126-101-11	ELECT	100MF	20%	16V
C304	1-137-031-11	FILM	0.22MF	10%	100V	C357	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C305	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	C358	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C306	1-124-902-00	ELECT	0.47MF	20%	50V	C360	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C307	1-124-902-00	ELECT	0.47MF	20%	50V	C361	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C308	1-124-902-00	ELECT	0.47MF	20%	50V	C363	1-163-033-00	CERAMIC CHIP	0.022MF		50V
C309	1-124-902-00	ELECT	0.47MF	20%	50V	C371	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C310	1-137-098-11	FILM	0.1MF	10%	100V	C372	1-124-477-11	ELECT	47MF	20%	16V
C311	1-137-098-11	FILM	0.1MF	10%	100V	C373	1-124-477-11	ELECT	47MF	20%	16V
C312	1-124-902-00	ELECT	0.47MF	20%	50V	C374	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C313	1-124-902-00	ELECT	0.47MF	20%	50V	C375	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C314	1-124-902-00	ELECT	0.47MF	20%	50V	C376	1-124-034-51	ELECT	33MF	20%	16V
C315	1-124-791-11	ELECT	1MF	20%	50V	C377	1-124-119-00	ELECT	330MF	20%	16V
C316	1-124-927-11	ELECT	4.7MF	20%	50V	C378	1-124-034-51	ELECT	33MF	20%	16V
C317	1-164-232-11	CERAMIC CHIP	0.01MF			C379	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C318	1-124-927-11	ELECT	4.7MF	20%	50V	C380	1-163-090-00	CERAMIC CHIP	7PF	0.25PF	50V
C319	1-124-927-11	ELECT	4.7MF	20%	50V	C381	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C320	1-124-910-11	ELECT	47MF	20%	50V	C382	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C321	1-137-027-11	FILM	0.82MF	10%	63V	C383	1-163-197-00	CERAMIC CHIP	470PF	5%	50V
C322	1-163-077-00	CERAMIC CHIP	0.1MF			C384	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C323	1-164-232-11	CERAMIC CHIP	0.01MF			C385	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C324	1-164-232-11	CERAMIC CHIP	0.01MF			C386	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C325	1-163-038-00	CERAMIC CHIP	0.1MF			C387	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C326	1-124-910-11	ELECT	47MF	20%	50V	C388	1-164-232-11	CERAMIC CHIP	0.01MF		50V
C327	1-124-910-11	ELECT	47MF	20%	50V	C389	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C328	1-163-038-00	CERAMIC CHIP	0.1MF			C390	1-123-875-11	ELECT	10MF	20%	50V
C329	1-163-123-00	CERAMIC CHIP	180PF	5%	50V	C391	1-123-875-11	ELECT	10MF	20%	50V
C330	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	C392	1-123-875-11	ELECT	10MF	20%	50V
C331	1-137-098-11	FILM	0.1MF	10%	100V	C393	1-126-101-11	ELECT	100MF	20%	16V
C332	1-137-098-11	FILM	0.1MF	10%	100V	C394	1-126-101-11	ELECT	100MF	20%	16V
C333	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	C395	1-126-101-11	ELECT	100MF	20%	16V
C335	1-163-119-00	CERAMIC CHIP	120PF	5%	50V	C396	1-126-101-11	ELECT	100MF	20%	16V
C337	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	C397	1-124-791-11	ELECT	1MF	20%	50V
C338	1-137-102-11	FILM	0.022MF	10%	250V	C398	1-123-875-11	ELECT	10MF	20%	50V
C339	1-164-232-11	CERAMIC CHIP	0.01MF			C399	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C340	1-126-103-11	ELECT	470MF	20%	16V	C1301	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C341	1-164-232-11	CERAMIC CHIP	0.01MF			C1302	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C342	1-124-791-11	ELECT	1MF	20%	50V	C1303	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C343	1-163-038-00	CERAMIC CHIP	0.1MF			C1304	1-123-875-11	ELECT	10MF	20%	50V
						C1305	1-126-101-11	ELECT	100MF	20%	16V

The components identified by shading and mark A are critical for safety.
Replace only with part number specified.

B1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1306	1-163-038-00	CERAMIC CHIP 0.1MF	25V	FL301	1-236-620-11	FILTER, LOW PASS	
C1307	1-163-038-00	CERAMIC CHIP 0.1MF	25V	FL302	1-236-620-11	FILTER, LOW PASS	
C1308	1-163-038-00	CERAMIC CHIP 0.1MF	25V	FL303	1-236-620-11	FILTER, LOW PASS	
C1309	1-164-232-11	CERAMIC CHIP 0.01MF	50V	FL305	1-236-164-11	ENCAPSULATED COMPONENT	
C1310	1-164-232-11	CERAMIC CHIP 0.01MF	50V				
C1311	1-163-038-00	CERAMIC CHIP 0.1MF	25V			<IC>	
C1312	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C1313	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC301	8-759-503-41	IC TDA4580-V6	
C1314	1-163-109-00	CERAMIC CHIP 47PF	5%	IC302	8-759-980-60	IC TDA8442N3	
C1315	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC303	8-759-510-48	IC TDA4660T	
C1316	1-163-141-00	CERAMIC CHIP 0.001MF	5%	IC304	8-759-510-47	IC TDA4650WP	
C1317	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC305	8-759-144-84	IC UPC24M05HF	
C1318	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C1319	1-164-232-11	CERAMIC CHIP 0.01MF	50V	IC306	8-759-510-50	IC HCF4052BM	
C1320	1-164-232-11	CERAMIC CHIP 0.01MF	50V	IC308	8-752-006-12	IC CX20061	
C1321	1-164-232-11	CERAMIC CHIP 0.01MF	50V	IC310	8-752-337-07	IC CXD20110	
C1322	1-164-232-11	CERAMIC CHIP 0.01MF	50V	IC311	8-759-996-49	IC MB40968PF	
C1323	1-164-232-11	CERAMIC CHIP 0.01MF	50V	IC312	8-752-338-45	IC CXK1202Q	
C1324	1-163-033-00	CERAMIC CHIP 0.022MF	50V	IC313	8-752-338-45	IC CXK1202Q	
C1325	1-163-038-00	CERAMIC CHIP 0.1MF	25V	IC315	8-752-334-55	IC CXD1175AM	
C1326	1-164-232-11	CERAMIC CHIP 0.01MF	50V			<COIL>	
C1327	1-163-115-00	CERAMIC CHIP 82PF	5%				
C1328	1-163-809-11	CERAMIC CHIP 0.047MF	10%	L301	1-408-405-00	INDUCTOR	4.7UH
C1329	1-163-035-00	CERAMIC CHIP 0.047MF	50V	L303	1-404-554-11	COIL	
C1330	1-164-232-11	CERAMIC CHIP 0.01MF	10%	L304	1-408-405-00	INDUCTOR	4.7UH
				L305	1-408-402-00	INDUCTOR	2.7UH
C1331	1-164-187-11	CERAMIC CHIP 390PF	2%	L306	1-408-405-00	INDUCTOR	4.7UH
C1333	1-126-101-11	ELECT	20%	L308	1-404-495-00	COIL	
		100MF		L309	1-408-415-00	INDUCTOR	33UH
				L310	1-408-419-00	INDUCTOR	68UH
				L312	1-404-495-00	COIL	
				L313	1-404-554-11	COIL	
				L314	1-408-409-00	INDUCTOR	10UH
CT301	1-141-418-11	CAP, ADJ		L320	1-408-405-00	INDUCTOR	4.7UH
CT302	1-141-418-11	CAP, ADJ		L321	1-408-405-00	INDUCTOR	4.7UH
				L323	1-408-398-00	INDUCTOR	1.2UH
				L325	1-408-405-00	INDUCTOR	4.7UH
				L326	1-408-421-00	INDUCTOR	100UH
				L327	1-408-402-00	INDUCTOR	2.7UH
				L1301	1-408-425-00	INDUCTOR	220UH
						<IC LINK>	
D301	8-719-951-22	DIODE IMN10					
D304	8-719-989-26	DIODE DAN212K					
D305	8-719-989-26	DIODE DAN212K					
D307	8-719-106-62	DIODE RD11M-B2					
D308	8-719-989-26	DIODE DAN212K					
D309	8-719-989-26	DIODE DAN212K					
D310	8-719-106-62	DIODE RD11M-B2					
D311	8-719-106-62	DIODE RD11M-B2					
D312	8-719-106-62	DIODE RD11M-B2					
D314	8-719-800-76	DIODE ISS226					
D318	8-719-800-76	DIODE ISS226					
D319	8-719-800-76	DIODE ISS226					
D320	8-719-800-76	DIODE ISS226					
D321	8-719-105-91	DIODE RD5.6M-B2					
D322	8-719-400-18	DIODE MA152WK					
D330	8-719-989-26	DIODE DAN212K					
D331	8-719-914-44	DIODE DAP202K					
D333	8-719-951-22	DIODE IMN10					
D336	8-719-400-18	DIODE MA152WK					
D340	8-719-800-76	DIODE ISS226					
D341	8-719-989-26	DIODE DAN212K					
						<TRANSISTOR>	
				Q301	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q302	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q303	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q304	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q305	8-729-901-06	TRANSISTOR DTA144EK	
				Q306	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q307	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q308	8-729-901-00	TRANSISTOR DTC124EK	
				Q310	8-729-901-00	TRANSISTOR DTC124EK	
				Q311	8-729-901-00	TRANSISTOR DTC124EK	
				Q320	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q321	8-729-216-22	TRANSISTOR 2SA1162-G	
				Q322	8-729-216-22	TRANSISTOR 2SA1162-G	
				Q323	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q324	8-729-901-78	TRANSISTOR 2SC2412K-R	
				Q327	8-729-216-22	TRANSISTOR 2SA1162-G	
				Q328	8-729-216-22	TRANSISTOR 2SA1162-G	

B1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q329	8-729-216-22	TRANSISTOR 2SA1162-G		R312	1-216-019-00	METAL GLAZE	56 5% 1/10W
Q330	8-729-901-78	TRANSISTOR 2SC2412K-R		R313	1-216-019-00	METAL GLAZE	56 5% 1/10W
Q331	8-729-216-22	TRANSISTOR 2SA1162-G		R314	1-216-019-00	METAL GLAZE	56 5% 1/10W
Q332	8-729-216-22	TRANSISTOR 2SA1162-G		R315	1-216-023-00	METAL GLAZE	82 5% 1/10W
Q333	8-729-901-00	TRANSISTOR DTC124EK		R316	1-216-081-00	METAL GLAZE	22K 5% 1/10W
Q334	8-729-901-00	TRANSISTOR DTC124EK		R317	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q335	8-729-901-78	TRANSISTOR 2SC2412K-R		R318	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q336	8-729-901-78	TRANSISTOR 2SC2412K-R		R319	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q337	8-729-901-78	TRANSISTOR 2SC2412K-R		R320	1-216-198-00	METAL GLAZE	1K 5% 1/8W
Q338	8-729-216-22	TRANSISTOR 2SA1162-G		R321	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q339	8-729-901-78	TRANSISTOR 2SC2412K-R		R322	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q340	8-729-901-78	TRANSISTOR 2SC2412K-R		R323	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
Q341	8-729-901-78	TRANSISTOR 2SC2412K-R		R324	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q342	8-729-901-78	TRANSISTOR 2SC2412K-R		R325	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q343	8-729-901-78	TRANSISTOR 2SC2412K-R		R326	1-216-009-00	METAL GLAZE	22 5% 1/10W
Q344	8-729-901-78	TRANSISTOR 2SC2412K-R		R327	1-216-009-00	METAL GLAZE	22 5% 1/10W
Q345	8-729-901-78	TRANSISTOR 2SC2412K-R		R328	1-216-009-00	METAL GLAZE	22 5% 1/10W
Q346	8-729-901-78	TRANSISTOR 2SC2412K-R		R329	1-216-031-00	METAL GLAZE	180 5% 1/10W
Q347	8-729-901-78	TRANSISTOR 2SC2412K-R		R330	1-216-031-00	METAL GLAZE	180 5% 1/10W
Q348	8-729-901-00	TRANSISTOR DTC124EK		R331	1-216-031-00	METAL GLAZE	180 5% 1/10W
Q350	8-729-901-78	TRANSISTOR 2SC2412K-R		R332	1-216-182-00	METAL GLAZE	220 5% 1/8W
Q352	8-729-216-22	TRANSISTOR 2SA1162-G		R333	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q353	8-729-901-78	TRANSISTOR 2SC2412K-R		R335	1-216-101-00	METAL GLAZE	150K 5% 1/10W
Q354	8-729-901-78	TRANSISTOR 2SC2412K-R		R336	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q355	8-729-901-78	TRANSISTOR 2SC2412K-R		R337	1-216-093-00	METAL GLAZE	68K 5% 1/10W
Q356	8-729-216-22	TRANSISTOR 2SA1162-G		R338	1-216-085-00	METAL GLAZE	33K 5% 1/10W
Q357	8-729-216-22	TRANSISTOR 2SA1162-G		R339	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
Q358	8-729-901-78	TRANSISTOR 2SC2412K-R		R340	1-216-103-00	METAL GLAZE	180K 5% 1/10W
Q359	8-729-216-22	TRANSISTOR 2SA1162-G		R341	1-216-115-00	METAL GLAZE	560K 5% 1/10W
Q360	8-729-901-78	TRANSISTOR 2SC2412K-R		R342	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
Q361	8-729-901-78	TRANSISTOR 2SC2412K-R		R343	1-216-043-00	METAL GLAZE	560 5% 1/10W
Q362	8-729-901-78	TRANSISTOR 2SC2412K-R			1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
Q363	8-729-901-78	TRANSISTOR 2SC2412K-R		R344	1-216-089-00	METAL GLAZE	47K 5% 1/10W
Q364	8-729-216-22	TRANSISTOR 2SA1162-G		R345	1-216-097-00	METAL GLAZE	100K 5% 1/10W
Q365	8-729-216-22	TRANSISTOR 2SA1162-G		R346	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q366	8-729-901-78	TRANSISTOR 2SC2412K-R		R347	1-216-121-00	METAL GLAZE	1M 5% 1/10W
Q367	8-729-901-78	TRANSISTOR 2SC2412K-R		R348	1-216-001-00	METAL GLAZE	10 5% 1/10W
Q368	8-729-901-78	TRANSISTOR 2SC2412K-R		R349	1-216-001-00	METAL GLAZE	10 5% 1/10W
Q369	8-729-901-78	TRANSISTOR 2SC2412K-R		R350	1-216-184-00	METAL GLAZE	270 5% 1/8W
Q370	8-729-901-78	TRANSISTOR 2SC2412K-R		R351	1-216-184-00	METAL GLAZE	270 5% 1/8W
Q371	8-729-901-78	TRANSISTOR 2SC2412K-R		R352	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
Q372	8-729-901-78	TRANSISTOR 2SC2412K-R		R353	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q373	8-729-901-00	TRANSISTOR DTC124EK		R354	1-216-037-00	METAL GLAZE	330 5% 1/10W
Q1301	8-729-901-00	TRANSISTOR DTC124EK		R355	1-216-033-00	METAL GLAZE	220 5% 1/10W
Q1302	8-729-901-78	TRANSISTOR 2SC2412K-R		R356	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q1303	8-729-901-00	TRANSISTOR DTC124EK		R357	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
<RESISTOR>							
JR302	1-216-295-00	METAL GLAZE	0 5% 1/10W	R358	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR304	1-216-296-00	METAL GLAZE	0 5% 1/8W	R359	1-216-041-00	METAL GLAZE	470 5% 1/10W
JR305	1-216-295-00	METAL GLAZE	0 5% 1/10W	R361	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR390	1-216-295-00	METAL GLAZE	0 5% 1/10W	R362	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR391	1-216-295-00	METAL GLAZE	0 5% 1/10W	R363	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R301	1-216-033-00	METAL GLAZE	220 5% 1/10W	R364	1-216-033-00	METAL GLAZE	220 5% 1/10W
R302	1-216-033-00	METAL GLAZE	220 5% 1/10W	R365	1-216-035-00	METAL GLAZE	270 5% 1/10W
R303	1-216-033-00	METAL GLAZE	220 5% 1/10W	R366	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R304	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R367	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R305	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R368	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R306	1-216-035-00	METAL GLAZE	270 5% 1/10W	R369	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R307	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R370	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R309	1-216-025-00	METAL GLAZE	100 5% 1/10W	R371	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R310	1-216-025-00	METAL GLAZE	100 5% 1/10W	R372	1-216-033-00	METAL GLAZE	220 5% 1/10W
R311	1-216-025-00	METAL GLAZE	100 5% 1/10W	R373	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
R374	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1339	1-216-039-00	METAL GLAZE	390 5% 1/10W		
R375	1-216-043-00	METAL GLAZE	560 5% 1/10W	R1340	1-216-025-00	METAL GLAZE	100 5% 1/10W		
R376	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1341	1-216-667-11	METAL CHIP	4.7K 0.50% 1/10W		
R377	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1342	1-216-025-00	METAL GLAZE	100 5% 1/10W		
R378	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1343	1-216-043-00	METAL GLAZE	560 5% 1/10W		
R379	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1344	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W		
R380	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1345	1-216-077-00	METAL GLAZE	15K 5% 1/10W		
R381	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1346	1-216-025-00	METAL GLAZE	100 5% 1/10W		
R382	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R1347	1-216-025-00	METAL GLAZE	100 5% 1/10W		
R383	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1348	1-216-085-00	METAL GLAZE	33K 5% 1/10W		
R384	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R1349	1-216-075-00	METAL GLAZE	12K 5% 1/10W		
R385	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1350	1-216-039-00	METAL GLAZE	390 5% 1/10W		
R386	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R1351	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
R387	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1352	1-216-041-00	METAL GLAZE	470 5% 1/10W		
R388	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R1353	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W		
R389	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1354	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W		
R390	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1355	1-216-045-00	METAL GLAZE	680 5% 1/10W		
R391	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1356	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W		
R392	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1357	1-216-049-00	METAL GLAZE	1K 5% 1/10W		
R393	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1358	1-216-081-00	METAL GLAZE	22K 5% 1/10W		
R394	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1359	1-216-049-00	METAL GLAZE	1K 5% 1/10W		
R395	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1360	1-216-049-00	METAL GLAZE	1K 5% 1/10W		
R396	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1361	1-216-049-00	METAL GLAZE	1K 5% 1/10W		
R397	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R1362	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W		
R398	1-216-035-00	METAL GLAZE	270 5% 1/10W	R1363	1-216-039-00	METAL GLAZE	390 5% 1/10W		
R399	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R1364	1-216-049-00	METAL GLAZE	1K 5% 1/10W		
R403	1-216-035-00	METAL GLAZE	270 5% 1/10W	R1365	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W		
R1301	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1366	1-216-083-00	METAL GLAZE	27K 5% 1/10W		
R1302	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1367	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W		
R1303	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1368	1-216-033-00	METAL GLAZE	220 5% 1/10W		
R1305	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R1369	1-216-031-00	METAL GLAZE	180 5% 1/10W		
R1308	1-216-295-00	METAL GLAZE	0 5% 1/10W	(KV-E2521D ONLY)		R1370	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	(KV-E2921D ONLY)		R1371	1-216-031-00	METAL GLAZE	180 5% 1/10W
				(KV-E2921D ONLY)		R1372	1-216-047-00	METAL GLAZE	820 5% 1/10W
R1309	1-216-023-00	METAL GLAZE	82 5% 1/10W	R1373	1-216-035-00	METAL GLAZE	270 5% 1/10W		
R1310	1-216-047-00	METAL GLAZE	820 5% 1/10W	R1374	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W		
R1311	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1375	1-216-208-00	METAL GLAZE	2.7K 5% 1/8W		
R1312	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1376	1-216-748-11	METAL GLAZE	39K 5% 1/10W		
R1313	1-216-043-00	METAL GLAZE	560 5% 1/10W	R1377	1-216-748-11	METAL GLAZE	39K 5% 1/10W		
R1314	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R1378	1-216-748-11	METAL GLAZE	39K 5% 1/10W		
R1315	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1379	1-216-748-11	METAL GLAZE	39K 5% 1/10W		
R1316	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1380	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W		
R1319	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1381	1-216-033-00	METAL GLAZE	220 5% 1/10W		
R1320	1-216-641-11	METAL CHIP	390 0.50% 1/10W	R1382	1-216-089-00	METAL GLAZE	47K 5% 1/10W		
R1321	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1383	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W		
R1322	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1384	1-216-089-00	METAL GLAZE	47K 5% 1/10W		
R1323	1-216-643-11	METAL CHIP	470 0.50% 1/10W	R1385	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W		
R1324	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1386	1-216-047-00	METAL GLAZE	820 5% 1/10W		
R1325	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1387	1-216-031-00	METAL GLAZE	180 5% 1/10W		
R1326	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1388	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
R1327	1-216-029-00	METAL GLAZE	150 5% 1/10W	R1389	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
R1328	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1390	1-216-093-00	METAL GLAZE	68K 5% 1/10W		
R1329	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1391	1-216-208-00	METAL GLAZE	2.7K 5% 1/8W		
R1330	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1392	1-216-047-00	METAL GLAZE	820 5% 1/10W		
R1331	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1393	1-216-047-00	METAL GLAZE	820 5% 1/10W		
R1332	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1394	1-216-081-00	METAL GLAZE	22K 5% 1/10W		
R1333	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1395	1-216-081-00	METAL GLAZE	22K 5% 1/10W		
R1334	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1396	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
R1335	1-216-043-00	METAL GLAZE	560 5% 1/10W	R1397	1-216-073-00	METAL GLAZE	10K 5% 1/10W		
R1336	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1398	1-216-001-00	METAL GLAZE	10 5% 1/10W		
R1337	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	R1399	1-216-029-00	METAL GLAZE	150 5% 1/10W		
R1338	1-216-085-00	METAL GLAZE	33K 5% 1/10W						

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

B1 F A C

REF. NO. PART NO. DESCRIPTION

<VARIABLE RESISTOR>

RV301 1-238-012-11 RES, ADJ, CARBON 1K

<CRYSTAL>

X301 1-567-307-11 OSCILLATOR, CRYSTAL
X302 1-567-131-00 OSCILLATOR, CRYSTAL

*1-638-390-11 F BOARD

*1-580-690-11 PIN, CONNECTOR (PC BOARD) 4P
*4-341-752-01 EYELET

<FUSE>

F1601A 1-532-504-31 FUSE 4A/250V
1-533-230-11 HOLDER, FUSE; F1601

<SWITCH>

S1701A 1-571-433-11 SWITCH, PUSH (AC POWER)

A-1632-022-A A BOARD, COMPLETE

*1-560-290-00 PLUG, CONNECTOR (2.5MM PITCH)
*1-564-881-11 PLUG, CONNECTOR 4P
*1-564-886-11 PLUG, CONNECTOR 9P
*1-565-393-11 CONNECTOR, BOARD TO BOARD
*1-565-503-11 CONNECTOR, BOARD TO BOARD 12P

<CAPACITOR>

C101 1-126-233-11 ELECT 22MF 20% 50V
C102 1-126-103-11 ELECT 470MF 20% 16V
C104 1-124-910-11 ELECT 47MF 20% 50V
C106 1-126-233-11 ELECT 22MF 20% 50V
C108 1-136-165-00 FILM 0.1MF 5% 50V

C109 1-163-133-00 CERAMIC CHIP 470PF 5% 50V
C111 1-124-925-11 ELECT 2.2MF 20% 50V
C115 1-124-925-11 ELECT 2.2MF 20% 50V
C127 1-124-122-11 ELECT 100MF 20% 50V
C128 1-124-910-11 ELECT 47MF 20% 50V

C129 1-124-910-11 ELECT 47MF 20% 50V
C138 1-136-165-00 FILM 0.1MF 5% 50V
C171 1-163-005-11 CERAMIC CHIP 470PF 10% 50V
C172 1-163-005-11 CERAMIC CHIP 470PF 10% 50V
C177 1-102-074-00 CERAMIC 0.001MF 10% 50V

C181 1-101-004-00 CERAMIC 0.01MF 50V

<IC>

IC103 8-759-979-62 IC PCF8574

<COIL>

L100 1-410-683-31 INDUCTOR 560UH
L101 1-408-225-00 INDUCTOR 3.3UH
L102 1-408-413-00 INDUCTOR 22UH
L107 1-408-397-00 INDUCTOR 1UH

REF. NO. PART NO. DESCRIPTION

<TRANSISTOR>

Q113 8-729-901-78 TRANSISTOR 2SC2412K-R
Q114 8-729-901-78 TRANSISTOR 2SC2412K-R
Q115 8-729-901-78 TRANSISTOR 2SC2412K-R
Q116 8-729-901-78 TRANSISTOR 2SC2412K-R
Q125 8-729-900-89 TRANSISTOR DTC144ES

Q126 8-729-901-06 TRANSISTOR DTA144EK
Q181 8-729-901-78 TRANSISTOR 2SC2412K-R

<RESISTOR>

JR230 1-216-295-00 METAL GLAZE 0 5% 1/10W
JR252 1-216-296-00 METAL GLAZE 0 5% 1/8W
JR253 1-216-296-00 METAL GLAZE 0 5% 1/8W
JR255 1-216-296-00 METAL GLAZE 0 5% 1/8W
JR256 1-216-296-00 METAL GLAZE 0 5% 1/8W

JR257 1-216-296-00 METAL GLAZE 0 5% 1/8W
JR258 1-216-296-00 METAL GLAZE 0 5% 1/8W
R101 1-216-025-00 METAL GLAZE 100 5% 1/10W
R105 1-216-079-00 METAL GLAZE 18K 5% 1/10W
R107 1-216-081-00 METAL GLAZE 22K 5% 1/10W

R108 1-216-079-00 METAL GLAZE 18K 5% 1/10W
R110 1-249-429-11 CARBON 10K 5% 1/4W
R111 1-216-057-00 METAL GLAZE 2.2K 5% 1/10W
R116 1-216-023-00 METAL GLAZE 82 5% 1/10W
R118 1-216-085-00 METAL GLAZE 33K 5% 1/10W

R128 1-216-027-00 METAL GLAZE 120 5% 1/10W
R129 1-216-057-00 METAL GLAZE 2.2K 5% 1/10W
R130 1-216-057-00 METAL GLAZE 2.2K 5% 1/10W
R157 1-216-049-00 METAL GLAZE 1K 5% 1/10W
R158 1-249-409-11 CARBON 220 5% 1/4W

R159 1-249-409-11 CARBON 220 5% 1/4W
R161 1-216-089-00 METAL GLAZE 47K 5% 1/10W
R162 1-216-095-00 METAL GLAZE 82K 5% 1/10W
R163 1-216-095-00 METAL GLAZE 82K 5% 1/10W
R164 1-216-075-00 METAL GLAZE 12K 5% 1/10W

R165 1-216-075-00 METAL GLAZE 12K 5% 1/10W
R167 1-216-059-00 METAL GLAZE 2.7K 5% 1/10W
R168 1-216-089-00 METAL GLAZE 47K 5% 1/10W
R169 1-216-059-00 METAL GLAZE 2.7K 5% 1/10W
R181 1-216-049-00 METAL GLAZE 1K 5% 1/10W

R182 1-216-065-00 METAL GLAZE 4.7K 5% 1/10W
R193 1-216-073-00 METAL GLAZE 10K 5% 1/10W
R194 1-216-017-00 METAL GLAZE 47 5% 1/10W
R195 1-216-017-00 METAL GLAZE 47 5% 1/10W
R196 1-216-113-00 METAL GLAZE 470K 5% 1/10W

<TUNER>

TU101A 1-465-301-11 TUNER, ET (UV-816(PLL))

<IF BLOCK>

VIF101 1-466-154-21 IF BLOCK (IFG-389S)

*A-1638-011-A C BOARD, COMPLETE (KV-E2521D ONLY)

*A-1638-013-A C BOARD, COMPLETE (KV-E2921D ONLY)

*1-506-371-00 PIN, CONNECTOR 2P

*1-508-765-00 PIN, CONNECTOR (5MM PITCH) 3P

*1-568-878-51 PIN, CONNECTOR 3P

C D

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
<CAPACITOR>									
C002	1-163-205-00	CERAMIC CHIP 0.001MF	5%	50V	C525	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C003	1-124-925-11	ELECT 2.2MF	20%	50V	C526	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
C004	1-124-120-11	ELECT 220MF	20%	16V	C527	1-137-098-11	FILM 0.1MF	10%	100V
C005	1-124-791-11	ELECT 1MF	20%	50V	C531	1-124-190-00	ELECT 680MF	10%	25V
C008	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C532	1-124-122-11	ELECT 100MF	20%	50V
C009	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C533	1-137-096-11	FILM 0.068MF	10%	100V
C010	1-124-120-11	ELECT 220MF	20%	16V	C534	1-124-120-11	ELECT 220MF	20%	16V
C011	1-164-232-11	CERAMIC CHIP 0.01MF	5%	50V	C536	1-131-365-00	TANTALUM 10MF	10%	16V
C013	1-137-098-11	FILM 0.1MF	10%	100V	C537	1-124-791-11	ELECT 1MF	20%	50V
C014	1-137-098-11	FILM 0.1MF	10%	100V	C538	1-108-680-11	MYLAR 0.001MF	10%	100V
C015	1-124-902-00	ELECT 0.47MF	20%	50V	C539	1-163-129-00	CERAMIC CHIP 330PF	5%	50V
C016	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	C540	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C017	1-137-098-11	FILM 0.1MF	10%	100V	C592	1-124-122-11	ELECT 100MF	20%	50V
C018	1-163-127-00	CERAMIC CHIP 270PF	5%	50V	C593	1-163-129-00	CERAMIC CHIP 330PF	5%	50V
C019	1-137-094-11	FILM 0.047MF	10%	100V	C601	Δ 1-161-964-61	CERAMIC 0.0047MF	250V	
C021	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C602	Δ 1-161-964-61	CERAMIC 0.0047MF	250V	
C023	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C603	Δ 1-161-964-61	CERAMIC 0.0047MF	250V	
C024	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	C604	Δ 1-125-318-11	ELECT(BLOCK) 220MF	20%	400V
C027	1-124-910-11	ELECT 47MF	20%	50V	C605	1-124-484-11	ELECT 220MF	20%	35V
C030	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C606	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C031	1-163-081-00	CERAMIC CHIP 0.22MF		25V	C607	1-137-028-11	FILM 1MF	10%	63V
C032	1-163-081-00	CERAMIC CHIP 0.22MF		25V	C608	1-124-927-11	ELECT 4.7MF	20%	50V
C033	1-163-181-00	CERAMIC CHIP 100PF	5%	50V	C611	1-124-910-11	ELECT 47MF	20%	50V
C034	1-123-875-11	ELECT 10MF	20%	50V	C612	1-108-680-11	MYLAR 0.001MF	10%	100V
C034	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C613	1-136-539-11	FILM 0.0022MF	3%	2KV
C034	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C614	1-102-030-00	CERAMIC 330PF	10%	500V
C251	1-124-791-11	ELECT 1MF	20%	50V	C615	1-128-142-11	ELECT 1500MF	20%	25V
C252	1-126-233-11	ELECT 22MF	20%	50V	C616	1-102-030-00	CERAMIC 330PF	10%	500V
C253	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C617	1-124-122-11	ELECT 100MF	20%	50V
C254	1-137-098-11	FILM 0.1MF	10%	100V	C618	1-162-115-00	CERAMIC 330PF	10%	2KV
C255	1-124-636-00	ELECT 3300MF	20%	25V	C619	1-128-320-51	ELECT 2200MF	20%	16V
C261	1-124-791-11	ELECT 1MF	20%	50V	C620	1-136-173-00	FILM 0.47MF	5%	50V
C262	1-126-233-11	ELECT 22MF	20%	50V	C621	1-124-347-00	ELECT 100MF	20%	160V
C263	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C622	1-128-320-51	ELECT 2200MF	20%	16V
C264	1-137-098-11	FILM 0.1MF	10%	100V	C623	1-124-910-11	ELECT 47MF	20%	50V
C265	1-124-564-11	ELECT 4700MF	20%	25V	C624	1-124-122-11	ELECT 100MF	20%	50V
C270	1-137-035-11	FILM 0.47MF	10%	100V	C625	1-124-360-00	ELECT 1000MF	20%	16V
C274	1-137-035-11	FILM 0.47MF	10%	100V	C626	1-124-907-11	ELECT 10MF	20%	50V
C501	1-124-927-11	ELECT 4.7MF	20%	50V	C627	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C502	1-124-927-11	ELECT 4.7MF	20%	50V	C631	1-124-927-11	ELECT 4.7MF	20%	50V
C503	1-137-049-11	FILM 0.015MF	10%	400V	C632	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C504	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	C633	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C505	1-108-794-11	MYLAR 0.0015MF	5%	50V	C801	1-126-105-11	ELECT 1000MF	20%	35V
C506	1-137-102-11	FILM 0.022MF	10%	250V	C802	1-102-030-00	CERAMIC 330PF	10%	500V
C507	1-137-033-11	FILM 0.33MF	10%	100V	C804	1-123-948-00	ELECT 22MF	20%	250V
C508	1-137-102-11	FILM 0.022MF	10%	250V	C805	1-162-114-00	CERAMIC 0.0047MF	20%	2KV
C509	1-137-098-11	FILM 0.1MF	10%	100V	C806	1-137-098-11	FILM 0.1MF	10%	100V
C510	1-161-959-00	CERAMIC 22PF	10%	500V	C807	1-106-395-00	MYLAR 0.15MF	10%	200V
C511	1-108-686-11	MYLAR 0.0033MF	10%	100V	C810	1-123-024-21	ELECT 33MF	10%	160V
C512	1-137-098-11	FILM 0.1MF	10%	100V	C811	1-136-113-00	FILM 2MF	5%	200V
C513	1-163-125-00	CERAMIC CHIP 220PF	5%	50V	C812	1-124-634-11	ELECT 1MF	20%	250V
C514	1-137-031-11	FILM 0.22MF	10%	100V	C813	1-102-212-00	CERAMIC 820PF	10%	500V
C515	1-124-791-11	ELECT 1MF	20%	50V	C814	Δ 1-161-731-51	CERAMIC 0.001MF	10%	2KV
C516	1-108-680-11	MYLAR 0.001MF	10%	100V	C815	1-136-111-00	FILM 1MF	5%	200V
C517	1-124-252-00	ELECT 0.33MF	20%	50V				(KV-E2521D ONLY)	
C518	1-124-902-00	ELECT 0.47MF	20%	50V		1-136-54Q-11	FILM 0.82MF	5%	200V
C519	1-136-173-00	FILM 0.47MF	5%	50V	C817	Δ 1-136-565-11	FILM 0.015MF	3%	(KV-E2921D ONLY)
	1-136-171-00	FILM 0.33MF	5%	50V		Δ 1-136-591-11	FILM 0.017MF	3%	(KV-E2521D ONLY)
C520	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V				(KV-E2921D ONLY)	
C521	1-137-098-11	FILM 0.1MF	10%	100V	C818	Δ 1-129-721-51	FILM 0.039MF	10%	630V
C522	1-124-122-11	ELECT 100MF	20%	50V	C819	Δ 1-161-731-51	CERAMIC 0.001MF	10%	2KV
C523	1-108-680-11	MYLAR 0.001MF	10%	100V					
C524	1-108-798-11	MYLAR 0.0033MF	5%	50V					

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D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
C820	1-137-046-11	FILM	0.0082MF	10%	400V	D618	8-719-109-89	DIODE RD5.6ES-B2
C821	▲ 1-162-116-51	CERAMIC	680PF	10%	2KV	D619	8-719-982-24	DIODE MTZJ-33A
				(KV-E2521D ONLY)		D620	8-719-800-76	DIODE ISS226
▲ A 1-162-134-51	CERAMIC	470PF		10%	2KV	D621	8-719-982-24	DIODE MTZJ-33A
C822	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	D622	8-719-911-19	DIODE ISS119
C823	1-137-043-11	FILM	0.0047MF	10%	400V	D623	8-719-911-19	DIODE ISS119
C824	1-102-212-00	CERAMIC	820PF	10%	500V	D624	8-719-911-19	DIODE ISS119
C825	1-137-102-11	FILM	0.022MF	10%	250V	D625	8-719-921-91	DIODE MTZJ-15A
C1601	▲ 1-136-518-11	FILM	0.33MF	20%	300V	D801	8-719-300-33	DIODE RU-3AM
C1602	▲ 1-136-519-11	FILM	0.47MF	20%	300V	D802	8-719-300-33	DIODE RU-3AM
C1603	▲ 1-164-246-51	CERAMIC	0.0022MF	20%	400V	D803	8-719-976-64	DIODE RGP02-17
				(KV-E2521D ONLY)		D804	8-719-911-55	DIODE U05G
C1604	▲ 1-164-246-51	CERAMIC	0.0022MF	20%	400V	D805	8-719-911-55	DIODE U05G
C1605	▲ 1-164-246-51	CERAMIC	0.0022MF	20%	400V	D806	8-719-945-80	DIODE ERC06-15S
C1607	▲ 1-161-964-61	CERAMIC	0.0047MF		250V	D807	8-719-945-80	DIODE ERC06-15S
						D808	8-719-900-26	DIODE ERD29-08J
<FILTER>								
<IC>								
CF001	1-577-364-11	VIBRATOR, CERAMIC		IC001	8-759-515-80	[C SDA20560-A008		
CF501	1-567-888-11	OSCILLATOR, CERAMIC		IC002	8-759-208-06	[C TC4051BPHB		
				IC003	8-759-945-58	[C RC4558P		
				IC005	8-759-748-56	[C SDA2546		
				IC251	8-759-988-94	[C TDA2050		
<CONNECTOR>								
CND801*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P (KV-E2521D ONLY)			IC261	4-812-134-00	RIVET NYLON, 3.5; IC251		
					8-759-988-94	[C TDA2050		
				IC501	4-812-134-00	RIVET NYLON, 3.5; IC261		
				IC502	8-759-970-73	[C TEA2028B		
					8-759-944-57	[C TDA8170		
<DIODE>								
D003	8-719-911-19	DIODE ISS119		IC601	8-759-988-95	[C TEA2260		
D005	8-719-109-89	DIODE RD5.6ES-B2		IC604	8-759-510-52	[C TEA7605		
D006	8-719-982-24	DIODE MTZJ-33A		IC608	8-759-037-26	[C TYA7812CT		
D007	8-719-982-08	DIODE MTZJ-3.9B						
D009	8-719-109-89	DIODE RD5.6ES-B2						
D010	8-719-921-54	DIODE MTZJ-6.2B		L501	1-408-225-00	INDUCTOR 3.3UH		
D011	8-719-921-54	DIODE MTZJ-6.2B		L601	*1-420-872-00	COIL, AIR CORE		
D012	8-719-911-19	DIODE ISS119		L602	1-410-396-41	FERRITE BEAD INDUCTOR		
D013	8-719-109-97	DIODE RD6.8ES-B2		L603	1-410-396-41	FERRITE BEAD INDUCTOR		
D271	8-719-921-88	DIODE MTZJ-13B		L604	1-410-671-31	INDUCTOR 47UH		
D272	8-719-911-19	DIODE ISS119		L605	1-459-585-11	COIL (WITH CORE) (DRUM TYPE)		
D501	8-719-911-19	DIODE ISS119		L606	1-421-013-00	COIL (HORIZONTAL CHOKES) 25UH		
D504	8-719-911-55	DIODE U05G		L607	1-410-671-31	INDUCTOR 47UH		
D506	8-719-800-76	DIODE ISS226 (KV-E2521D ONLY)		L801	1-459-087-00	COIL, HCC DUST CORE 3.9MMH		
D508	8-719-911-19	DIODE ISS119					(KV-E2521D ONLY)	
D509	8-719-911-19	DIODE ISS119		L803	1-459-104-00	COIL, DUST CORE		
D511	8-719-911-55	DIODE U05G		L804	1-408-239-00	INDUCTOR 4.7MMH		
D512	8-719-911-55	DIODE U05G		L805	1-459-755-11	COIL, HORIZONTAL LINEARITY		
D513	8-719-010-34	DIODE UZ-4.7BSC					(KV-E2521D ONLY)	
D514	8-719-911-19	DIODE ISS119 (KV-E2521D ONLY)		1-459-907-11	COIL, HORIZONTAL LINEARITY			
D515	8-719-911-19	DIODE ISS119 (KV-E2521D ONLY)						
D601	▲ 8-719-510-63	DIODE D4SB60L-F		L806	1-459-111-00	COIL, DRAM CORE (CDI) (KV-E2521D ONLY)		
D602	8-719-300-33	DIODE RU-3AM			1-459-087-00	COIL, HCC DUST CORE 3.9MMH		
D603	8-719-911-55	DIODE U05G					(KV-E2521D ONLY)	
D604	8-719-911-55	DIODE U05G		L809	*1-420-872-00	COIL, AIR CORE		
D605	8-719-911-55	DIODE U05G		L810	▲ 1-421-982-12	PMC (KV-E2521D ONLY)		
D606	8-719-300-33	DIODE RU-3AM						
D607	8-719-300-33	DIODE RU-3AM		▲ 1-421-794-21	TRANSFORMER, FERRITE (PMT)			
D608	8-719-300-33	DIODE RU-3AM					(KV-E2521D ONLY)	
D609	8-719-982-24	DIODE MTZJ-33A						
D610	8-719-300-59	DIODE CTU-12S						
D611	8-719-900-26	DIODE ERD29-08J						
D612	8-719-300-59	DIODE CTU-12S						
D613	8-719-979-85	DIODE EGP20G						
D614	8-719-979-85	DIODE EGP20G						
D616	8-719-921-54	DIODE MTZJ-6.2B						
D617	8-719-911-19	DIODE ISS119						
<TRANSFORMER>								
				LF1601	▲ 1-421-866-12	LFT		
				LF1602	▲ 1-421-776-11	LFT		
				LF1603	▲ 1-421-862-11	LFT		
				T601	▲ 1-450-038-11	S.R.T (KV-E2521D ONLY)		

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D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
T601	A 1-450-037-11	S.R.T (KV-E2921D ONLY)		R015	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
T602	A 1-424-277-11	TRANSFORMER, TRIGGER PULSE		R016	1-216-085-00	METAL GLAZE	33K 5% 1/10W
T801	A 1-437-090-21	HDT		R017	1-216-748-11	METAL GLAZE	39K 5% 1/10W
T802	A 1-439-416-11	TRANSFORMER ASSY, FLYBACK (UX-1600)		R018	1-216-095-00	METAL GLAZE	82K 5% 1/10W
		<IC LINK>		R019	1-216-025-00	METAL GLAZE	100 5% 1/10W
PS601	A 1-532-984-91	LINK, IC (ICP-N50) 2A		R020	1-216-025-00	METAL GLAZE	100 5% 1/10W
PS602	A 1-532-984-91	LINK, IC (ICP-N50) 2A		R021	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
PS603	A 1-532-679-91	LINK, IC (ICP-N15) 0.6A		R022	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
PS604	A 1-532-984-91	LINK, IC (ICP-N50) 2A		R024	1-216-073-00	METAL GLAZE	10K 5% 1/10W
		<TRANSISTOR>		R025	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q001	8-729-901-01	TRANSISTOR DTC144EK		R026	1-216-182-00	METAL GLAZE	220 5% 1/8W
Q002	8-729-901-01	TRANSISTOR DTC144EK		R027	1-216-025-00	METAL GLAZE	100 5% 1/10W
Q003	8-729-216-22	TRANSISTOR 2SA1162-G		R028	1-216-025-00	METAL GLAZE	100 5% 1/10W
Q004	8-729-216-22	TRANSISTOR 2SA1162-G		R029	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q005	8-729-901-01	TRANSISTOR DTC144EK		R030	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q006	8-729-901-01	TRANSISTOR DTC144EK		R031	1-216-081-00	METAL GLAZE	22K 5% 1/10W
Q007	8-729-901-78	TRANSISTOR 2SC2412K-R		R032	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q008	8-729-901-78	TRANSISTOR 2SC2412K-R		R033	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q009	8-729-901-78	TRANSISTOR 2SC2412K-R		R034	1-216-077-00	METAL GLAZE	15K 5% 1/10W
Q010	8-729-901-78	TRANSISTOR 2SC2412K-R		R035	1-216-081-00	METAL GLAZE	22K 5% 1/10W
Q251	8-729-901-78	TRANSISTOR 2SC2412K-R		R036	1-216-083-00	METAL GLAZE	27K 5% 1/10W
Q261	8-729-901-78	TRANSISTOR 2SC2412K-R		R037	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
Q271	8-729-901-78	TRANSISTOR 2SC2412K-R		R038	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
Q502	8-729-216-22	TRANSISTOR 2SA1162-G		R039	1-216-081-00	METAL GLAZE	22K 5% 1/10W
Q505	8-729-140-96	TRANSISTOR 2SD774-34		R040	1-216-077-00	METAL GLAZE	15K 5% 1/10W
Q506	8-729-140-97	TRANSISTOR 2SB734-34		R041	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q507	8-729-216-22	TRANSISTOR 2SA1162-G		R042	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q598	8-729-216-22	TRANSISTOR 2SA1162-G		R043	1-216-041-00	METAL GLAZE	470 5% 1/10W
Q601	8-729-122-03	TRANSISTOR 2SA1220A-P		R044	1-216-097-00	METAL GLAZE	100K 5% 1/10W
Q602	8-729-209-02	TRANSISTOR 2SD1548-LB		R045	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
Q603	8-729-122-03	TRANSISTOR 2SA1220A-P		R046	1-216-095-00	METAL GLAZE	82K 5% 1/10W
Q604	8-729-216-22	TRANSISTOR 2SA1162-G		R047	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q605	8-729-901-78	TRANSISTOR 2SC2412K-R		R048	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q606	8-729-901-78	TRANSISTOR 2SC2412K-R		R049	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF		R050	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
Q608	8-729-901-78	TRANSISTOR 2SC2412K-R		R051	1-216-041-00	METAL GLAZE	470 5% 1/10W
Q609	8-729-320-62	TRANSISTOR 2SD789-34		R052	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q801	8-729-901-78	TRANSISTOR 2SC2412K-R		R053	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q804	8-729-304-50	TRANSISTOR 2SD1941-06		R054	1-216-049-00	METAL GLAZE	1K 5% 1/10W
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK		R055	1-216-037-00	METAL GLAZE	330 5% 1/10W
		<RESISTOR>		R056	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W		R057	1-216-025-00	METAL GLAZE	100 5% 1/10W
JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W		R058	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR4	1-216-296-00	METAL GLAZE 0 5% 1/8W		R059	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR5	1-216-295-00	METAL GLAZE 0 5% 1/10W		R060	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR6	1-216-295-00	METAL GLAZE 0 5% 1/10W		R061	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR7	1-216-296-00	METAL GLAZE 0 5% 1/8W		R062	1-216-049-00	METAL GLAZE	1K 5% 1/10W
JR8	1-216-295-00	METAL GLAZE 0 5% 1/10W		R063	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R001	1-216-041-00	METAL GLAZE 470 5% 1/10W		R064	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R002	1-216-041-00	METAL GLAZE 470 5% 1/10W		R065	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R003	1-216-198-00	METAL GLAZE 1K 5% 1/8W		R066	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R004	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R067	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R005	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R068	1-216-174-00	METAL GLAZE	100 5% 1/8W
R006	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R069	1-216-174-00	METAL GLAZE	100 5% 1/8W
R007	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R070	1-216-198-00	METAL GLAZE	1K 5% 1/8W
R008	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R071	1-216-198-00	METAL GLAZE	1K 5% 1/8W
R009	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R072	1-216-222-00	METAL GLAZE	10K 5% 1/8W
R010	1-216-041-00	METAL GLAZE 470 5% 1/10W		R073	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R011	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R075	1-216-041-00	METAL GLAZE	470 5% 1/10W
R012	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R076	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R013	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R078	1-216-198-00	METAL GLAZE	1K 5% 1/8W
R014	1-216-085-00	METAL GLAZE 33K 5% 1/10W		R079	1-216-073-00	METAL GLAZE	10K 5% 1/10W
				R080	1-216-073-00	METAL GLAZE	10K 5% 1/10W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R081	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R534	1-216-119-00	METAL GLAZE	820K 5% 1/10W
R082	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R535	1-249-749-00	CARBON	2.2M 5% 1/4W
R083	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R536	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R084	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R537	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R085	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R538	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R086	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R539	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R087	1-216-035-00	METAL GLAZE	270 5% 1/10W	R540	1-216-013-00	METAL GLAZE	33 5% 1/10W
R088	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R541	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R093	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R542	1-216-308-00	METAL GLAZE	4.7 5% 1/10W
R094	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R543	1-249-451-11	CARBON	2.2 5% 1/4W
R095	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R544	1-247-745-11	CARBON	330 5% 1/2W
R096	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R545	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R098	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R546	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R251	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R547	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R252	1-216-039-00	METAL GLAZE	390 5% 1/10W	R548	1-216-349-00	METAL OXIDE	1 5% 1W F
R253	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R549	1-216-454-11	METAL OXIDE	390 5% 2W F
R254	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R550	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R255	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R551	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R256	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R553	1-215-869-11	METAL OXIDE	1K 5% 1W
R257	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R554	1-216-037-00	METAL GLAZE	330 5% 1/10W
R258	1-215-869-11	METAL OXIDE	1K 5% 1W F	R555	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R259	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R556	1-216-025-00	METAL GLAZE	100 5% 1/10W
R261	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R557	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R262	1-216-039-00	METAL GLAZE	390 5% 1/10W	R558	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R263	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R559	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R264	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R560	1-216-037-00	METAL GLAZE	330 5% 1/10W
R265	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R561	1-216-107-00	METAL GLAZE	270K 5% 1/10W
R266	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R570	1-216-045-00	METAL GLAZE	680 5% 1/10W
R267	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R591	1-216-047-00	METAL GLAZE	820 5% 1/10W
R268	1-215-869-11	METAL OXIDE	1K 5% 1W F	R592	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R269	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R593	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R270	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R594	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R271	1-216-045-00	METAL GLAZE	680 5% 1/10W	R597	1-216-041-00	METAL GLAZE	470 5% 1/10W
R272	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R598	1-215-900-11	METAL OXIDE	22K 5% 2W F
R273	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R600	1-249-381-11	CARBON	1 5% 1/4W
R274	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R601	1-216-353-00	METAL OXIDE	2.2 5% 1W F
R500	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R603	1-216-469-11	METAL OXIDE	12 5% 3W F
R501	1-216-041-00	METAL GLAZE	470 5% 1/10W	R604	1-216-025-00	METAL GLAZE	100 5% 1/10W
R502	1-216-033-00	METAL GLAZE	220 5% 1/10W	R605	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R503	1-216-035-00	METAL GLAZE	270 5% 1/10W	R606	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R504	1-249-420-11	CARBON	1.8K 5% 1/4W	R607	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R505	1-216-077-00	METAL GLAZE	15K 5% 1/10W		1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R506	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R608	1-216-488-11	METAL OXIDE	18K 5% 3W F
R509	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R609	1-216-007-00	METAL GLAZE	18 5% 1/10W
R510	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R610	1-244-941-00	CARBON	680K 5% 1/2W
R514	1-216-033-00	METAL GLAZE	220 5% 1/10W	R611	1-216-015-00	METAL GLAZE	39 5% 1/10W
R515	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R612	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R517	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R613	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R518	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R614	1-205-758-11	WIREDOWN	100 10% 10W F
R519	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R616	1-216-099-00	METAL GLAZE	120K 5% 1/10W
R520	1-216-037-00	METAL GLAZE	330 5% 1/10W	R617	1-216-037-00	METAL GLAZE	330 5% 1/10W
R521	1-216-025-00	METAL GLAZE	100 5% 1/10W	R618	1-216-431-11	METAL OXIDE	560 5% 1W F
R522	1-215-469-00	METAL	100K 1% 1/6W	R619	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R523	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R620	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R524	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R621	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R525	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R622	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R526	1-249-409-11	CARBON	220 5% 1/4W F	R623	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R527	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R624	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R528	1-216-031-00	METAL GLAZE	180 5% 1/10W	R625	1-215-865-11	METAL OXIDE	220 5% 1W F
R529	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W				
R530	1-249-448-11	CARBON	1.2 5% 1/4W F				
R531	1-216-099-00	METAL GLAZE	120K 5% 1/10W				
R532	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R533	1-216-295-00	METAL GLAZE	0 5% 1/10W				

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK	
R626	1-216-037-00	METAL GLAZE	330 5% 1/10W					
R628	1-216-001-00	METAL GLAZE	10 5% 1/10W					
R629	1-216-037-00	METAL GLAZE	330 5% 1/10W					
R633	1-216-049-00	METAL GLAZE	1K 5% 1/10W					
R634	1-216-430-11	METAL OXIDE	390 5% 1W F					
R635	1-216-073-00	METAL GLAZE	10K 5% 1/10W					
R636	1-216-073-00	METAL GLAZE	10K 5% 1/10W					
R643	1-217-189-21	WIREWOUND	0.12 5% 2W F					
R651	1-216-025-00	METAL GLAZE	100 5% 1/10W					
R653	1-205-758-11	WIREWOUND	100 10% 10W F					
R802	1-249-443-11	CARBON	0.47 5% 1/4W F		C751	1-101-361-00	CERAMIC	150PF 5% 50V
R805	1-249-448-11	CARBON	1.2 5% 1/4W F		C752	1-108-629-11	MYLAR	0.018MF 10% 100V
R806	1-216-093-00	METAL GLAZE	68K 5% 1/10W		C753	1-137-047-11	FILM	0.01MF 10% 400V
R807	1-215-869-11	METAL OXIDE	1K 5% 1W F		C754	1-102-980-00	CERAMIC	270PF 5% 50V
R809	1-202-821-11	SOLID	1.8K 10% 1/2W		C757	1-108-692-11	MYLAR	0.01MF 10% 200V
R810	1-202-818-00	SOLID	1K 10% 1/2W		C759	1-123-875-11	ELECT	10MF 20% 50V
R811	1-215-882-00	METAL OXIDE	22 5% 2W F		C760	1-124-917-11	ELECT	33MF 20% 50V
R812	1-249-494-11	CARBON	68K 5% 1/2W	(KV-E2521D ONLY)	C761	1-101-006-00	CERAMIC	0.047MF 50V
	1-247-281-00	CARBON	51K 5% 1/2W		C762	1-137-047-11	FILM	0.01MF 10% 400V
R815	1-215-884-11	METAL OXIDE	47 5% 2W F	(KV-E2921D ONLY)				
R816	1-215-868-00	METAL OXIDE	680 5% 1W F		L751	1-408-413-00	INDUCTOR	22UH
R817	1-216-049-00	METAL GLAZE	1K 5% 1/10W		L770	1-410-665-31	INDUCTOR	15UH
R820	1-249-403-11	CARBON	68 5% 1/4W					
R821	1-247-725-11	CARBON	10K 5% 1/4W F					
R822	1-217-778-11	FUSIBLE	1K 5% 1W F					
R825	1-216-345-11	METAL OXIDE	0.47 5% 1W F		Q751	8-729-119-78	TRANSISTOR	2SC2785-HFE
R826	1-216-097-00	METAL GLAZE	100K 5% 1/10W		Q752	8-729-119-78	TRANSISTOR	2SC2785-HFE
R827	1-216-073-00	METAL GLAZE	10K 5% 1/10W		Q753	8-729-140-97	TRANSISTOR	2SB734-34
R828	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W		Q754	8-729-140-96	TRANSISTOR	2SD774-34
R829	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W					
R831	1-249-451-11	CARBON	2.2 5% 1/4W					
R1601A	1-246-513-75	CARBON	47K 5% 1/4W		R751	1-249-418-11	CARBON	1.2K 5% 1/4W
R1602A	1-244-945-91	CARBON	1M 5% 1/2W		R752	1-249-426-11	CARBON	5.6K 5% 1/4W
R1603A	1-217-328-11	WIREWOUND	2.7 10% 7W F		R753	1-249-414-11	CARBON	560 5% 1/4W
R1604A	1-246-513-75	CARBON	47K 5% 1/4W		R754	1-249-434-11	CARBON	27K 5% 1/4W
R1605A	1-218-265-91	METAL GLAZE	8.2M 5% 1W		R755	1-249-405-11	CARBON	100 5% 1/4W
R5501	1-216-073-00	METAL GLAZE	10K 5% 1/10W		R756	1-249-419-11	CARBON	1.5K 5% 1/4W
R5503	1-216-308-00	METAL GLAZE	4.7 5% 1/10W	(KV-E2521D ONLY)	R757	1-249-405-11	CARBON	100 5% 1/4W
	1-216-001-00	METAL GLAZE	10 5% 1/10W		R758	1-249-409-11	CARBON	220 5% 1/4W
					R760	1-249-411-11	CARBON	330 5% 1/4W
					R761	1-249-429-11	CARBON	10K 5% 1/4W
R5504	1-216-121-00	METAL GLAZE	1M 5% 1/10W	(KV-E2921D ONLY)	R762	1-247-895-00	CARBON	470K 5% 1/4W
R5505	1-216-001-00	METAL GLAZE	10 5% 1/10W		R763	1-249-429-11	CARBON	10K 5% 1/4W
R5506	1-216-075-00	METAL GLAZE	12K 5% 1/10W	(KV-E2921D ONLY)	R764	1-249-455-11	CARBON	4.7 5% 1/4W
				R765	1-249-455-11	CARBON	4.7 5% 1/4W	
				R766	1-247-753-11	CARBON	1.2K 5% 1/2W	
<VARIABLE RESISTOR>								
RV501	1-238-013-11	RES, ADJ. CARBON	2.2K		R767	1-247-751-11	CARBON	820 5% 1/2W
RV502	1-238-016-11	RES, ADJ. CARBON	10K		R768	1-215-887-00	METAL OXIDE	150 5% 2W F
RV601	1-238-011-11	RES, ADJ. CARBON	470		R769	1-212-889-00	FUSIBLE	220 5% 1/4W F

<SPARK GAP>								
SG801	1-519-422-11	GAP, SPARK						
<CAPACITOR>								
<THERMISTOR>								
THP601A	1-808-059-32	THERMISTOR, POSITIVE			C1	1-126-101-11	ELECT	100MF 20% 16V
					C2	1-163-038-00	CERAMIC CHIP	0.1MF 25V
					C3	1-124-120-11	ELECT	220MF 20% 16V
					C4	1-163-077-00	CERAMIC CHIP	0.1MF 50V
					C5	1-124-120-11	ELECT	220MF 20% 16V
					C6	1-163-038-00	CERAMIC CHIP	0.1MF 25V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C7	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	JR11	1-216-295-00	METAL GLAZE 0 5% 1/10W
C8	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	JR12	1-216-295-00	METAL GLAZE 0 5% 1/10W
C9	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	JR13	1-216-296-00	METAL GLAZE 0 5% 1/8W
C10	1-163-038-00	CERAMIC CHIP 0.1MF		25V	JR14	1-216-296-00	METAL GLAZE 0 5% 1/8W
C11	1-163-038-00	CERAMIC CHIP 0.1MF		25V	JR16	1-216-296-00	METAL GLAZE 0 5% 1/8W
C12	1-163-038-00	CERAMIC CHIP 0.1MF		25V	JR17	1-216-295-00	METAL GLAZE 0 5% 1/10W
C13	1-163-038-00	CERAMIC CHIP 0.1MF		25V	JR21	1-216-296-00	METAL GLAZE 0 5% 1/8W
C14	1-124-927-11	ELECT 4.7MF	20%	50V	JR22	1-216-295-00	METAL GLAZE 0 5% 1/10W
C15	1-124-927-11	ELECT 4.7MF	20%	50V	JR23	1-216-295-00	METAL GLAZE 0 5% 1/10W
C16	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	JR24	1-216-296-00	METAL GLAZE 0 5% 1/8W
C17	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	JR26	1-216-296-00	METAL GLAZE 0 5% 1/8W
C18	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	JR27	1-216-295-00	METAL GLAZE 0 5% 1/10W
C19	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	JR201	1-216-295-00	METAL GLAZE 0 5% 1/10W
					JR204	1-216-295-00	METAL GLAZE 0 5% 1/10W
					JR207	1-216-295-00	METAL GLAZE 0 5% 1/10W
<CONNECTOR>							
CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR208	1-216-295-00	METAL GLAZE 0 5% 1/10W	
CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR211	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				JR213	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				JR219	1-216-296-00	METAL GLAZE 0 5% 1/8W	
				JR220	1-216-295-00	METAL GLAZE 0 5% 1/10W	
<DIODE>							
D1	8-719-105-91	DIODE RD5.6M-B2		JR223	1-216-295-00	METAL GLAZE 0 5% 1/10W	
D3	8-719-914-44	DIODE DAP202K		R1	1-218-326-11	METAL GLAZE 470 5% 1/2W	
D4	8-719-400-18	DIODE MA152WK		R3	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
D5	8-719-914-44	DIODE DAP202K		R4	1-216-025-00	METAL GLAZE 100 5% 1/10W	
D6	8-719-400-18	DIODE MA152WK		R5	1-216-047-00	METAL GLAZE 820 5% 1/10W	
D7	8-719-105-52	DIODE RD3.6M-B2		R6	1-216-001-00	METAL GLAZE 10 5% 1/10W	
D9	8-719-106-17	DIODE RD6.8M-B2		R7	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
				R8	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
				R9	1-216-308-00	METAL GLAZE 4.7 5% 1/10W	
				R02	1-216-214-00	METAL GLAZE 4.7K 5% 1/8W	
<IC>							
IC1	8-759-038-58	IC SDA20162-A002		R10	1-218-325-11	METAL GLAZE 120 5% 1/4W	
IC2	8-759-510-46	IC SAA5246P/E		R11	1-218-325-11	METAL GLAZE 120 5% 1/4W	
IC3	8-759-510-49	IC FCB61C65-70P		R12	1-218-325-11	METAL GLAZE 120 5% 1/4W	
				R13	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R14	1-216-001-00	METAL GLAZE 10 5% 1/10W	
<COIL>							
L1	1-408-403-00	INDUCTOR 3.3UH		R15	1-216-013-00	METAL GLAZE 33 5% 1/10W	
L2	1-408-407-00	INDUCTOR 6.8UH		R16	1-216-013-00	METAL GLAZE 33 5% 1/10W	
L3	1-408-407-00	INDUCTOR 6.8UH		R17	1-216-013-00	METAL GLAZE 33 5% 1/10W	
L4	1-408-407-00	INDUCTOR 6.8UH		R18	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R20	1-216-041-00	METAL GLAZE 470 5% 1/10W	
				R21	1-216-041-00	METAL GLAZE 470 5% 1/10W	
<IC LINK>							
PS1	Δ 1-532-679-91	LINK, IC (ICP-N15) 0.6A		R22	1-216-168-00	METAL GLAZE 56 5% 1/8W	
				R23	1-216-214-00	METAL GLAZE 4.7K 5% 1/8W	
				R24	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R25	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R26	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R27	1-216-214-00	METAL GLAZE 4.7K 5% 1/8W	
				R28	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
				R34	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R35	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R40	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R41	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R42	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R44	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				R46	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R47	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R49	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
							<VARIABLE RESISTOR>
JR01	1-216-295-00	METAL GLAZE 0 5% 1/10W					
JR02	1-216-295-00	METAL GLAZE 0 5% 1/10W					
JR03	1-216-295-00	METAL GLAZE 0 5% 1/10W					
JR08	1-216-295-00	METAL GLAZE 0 5% 1/10W					
JR09	1-216-295-00	METAL GLAZE 0 5% 1/10W					
							RV1 1-238-012-11 RES, ADJ, CARBON 1K

V H1 H2 J2 J1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<CRYSTAL>											
X1	1-579-266-21	CRYSTAL VIBRATOR		L1751	1-412-240-11	INDUCTOR, WIDE BAND					
X2	1-577-364-11	VIBRATOR, CERAMIC		L1752	1-412-240-11	INDUCTOR, WIDE BAND					

*1-638-391-11	H1 BOARD		*****	A-1651-018-A	J1 BOARD, COMPLETE (KV-E2521D ONLY)						
1-562-837-11	JACK			A-1651-020-A	J1 BOARD, COMPLETE (KV-E2921D ONLY)						
*1-564-512-11	PLUG, CONNECTOR 9P			1-561-534-41	SOCKET 21P						
1-568-678-11	TERMINAL BLOCK, S 3P			*1-564-524-11	PLUG, CONNECTOR 9P						
*1-568-879-51	PIN, CONNECTOR 4P			*1-564-527-11	PLUG, CONNECTOR 12P						
*1-568-881-51	PIN, CONNECTOR 6P			*1-566-641-11	CONNECTOR, HINGE (TAB) 18P						
<RESISTOR>											
R1651	1-249-413-11	CARBON	470 5% 1/4W	<CAPACITOR>							
R1652	1-249-413-11	CARBON	470 5% 1/4W	C203	1-124-925-11	ELECT	2.2MF	20%	50V		
<SWITCH>				C205	1-124-927-11	ELECT	4.7MF	20%	50V		
S1651	1-571-532-21	SWITCH, TACTIL		C206	1-124-925-11	ELECT	2.2MF	20%	50V		
S1652	1-571-532-21	SWITCH, TACTIL		C207	1-124-927-11	ELECT	4.7MF	20%	50V		
S1653	1-571-532-21	SWITCH, TACTIL		C213	1-126-233-11	ELECT	22MF	20%	50V		
*****				C214	1-137-045-11	FILM	0.0068MF	10%	400V		
*1-638-392-11	H2 BOARD		*****	C217	1-137-045-11	FILM	0.0068MF	10%	400V		
1-568-882-51	PIN, CONNECTOR 7P			C218	1-137-102-11	FILM	0.022MF	10%	250V		
*4-374-987-01	GUIDE, LIGHT			C219	1-137-102-11	FILM	0.022MF	10%	250V		
*4-381-686-01	BRACKET (B), LIGHT GUIDE			C220	1-108-686-11	MYLAR	0.0033MF	10%	100V		
<DIODE>											
D1651	8-719-948-31	DIODE LD-201VR		C221	1-108-686-11	MYLAR	0.0033MF	10%	100V		
*4-201-076-01	HOLDER, LED; D1651			C222	1-137-095-11	FILM	0.056MF	10%	100V		
D1652	8-719-948-31	DIODE LD-201VR		C223	1-137-095-11	FILM	0.056MF	10%	100V		
*4-201-076-01	HOLDER, LED; D1652			C224	1-137-047-11	FILM	0.01MF	10%	400V		
D1654	8-719-948-31	DIODE LD-201VR		C225	1-136-173-00	FILM	0.47MF	5%	50V		

*4-201-076-01	HOLDER, LED; D1654			C226	1-136-173-00	FILM	0.47MF	5%	50V		
<IC>				C227	1-137-102-11	FILM	0.022MF	10%	250V		
IC1651	8-741-101-75	IC SBX1610-11		C228	1-137-104-11	FILM	0.033MF	10%	250V		
<RESISTOR>				C229	1-137-049-11	FILM	0.015MF	10%	400V		
R1662	1-249-413-11	CARBON	470 5% 1/4W	C230	1-137-049-11	FILM	0.015MF	10%	400V		

*1-638-393-11	J2 BOARD		*****	C231	1-124-902-00	ELECT	0.47MF	20%	50V		
1-537-339-11	TERMINAL BOARD			C232	1-123-875-11	ELECT	10MF	20%	50V		
*1-560-278-21	PLUG, CONNECTOR 4P			C233	1-163-005-11	CERAMIC CHIP	470PF	10%	50V		
*1-564-517-11	PLUG, CONNECTOR 2P			C234	1-163-005-11	CERAMIC CHIP	470PF	10%	50V		
*1-564-519-11	PLUG, CONNECTOR 4P			C235	1-163-005-11	CERAMIC CHIP	470PF	10%	50V		
<CAPACITOR>											
C1751	1-101-005-00	CERAMIC	0.022MF	C236	1-163-005-11	CERAMIC CHIP	470PF	10%	50V		
C1752	1-101-005-00	CERAMIC	0.022MF	C237	1-124-902-00	ELECT	0.47MF	20%	50V		
C1755	1-102-114-00	CERAMIC	470PF	C238	1-163-125-00	CERAMIC CHIP	220PF	5%	50V		
C1756	1-102-114-00	CERAMIC	470PF	C239	1-126-103-11	ELECT	470MF	20%	16V		
			10% 50V	C240	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V		
				C241	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V		
				C242	1-163-033-00	CERAMIC CHIP	0.022MF	50V			
				C243	1-163-033-00	CERAMIC CHIP	0.022MF	50V			
				C244	1-163-033-00	CERAMIC CHIP	0.022MF	50V			
				C245	1-163-033-00	CERAMIC CHIP	0.022MF	50V			
				C1401	1-123-875-11	ELECT	10MF	20%	50V		
				C1402	1-126-103-11	ELECT	470MF	20%	16V		
				C1403	1-163-003-11	CERAMIC CHIP	330PF	10%	50V		
				C1404	1-137-035-11	FILM	0.47MF	10%	100V		
				C1405	1-136-107-00	CERAMIC CHIP	0.0047MF	10%	50V		
				C1406	1-137-035-11	FILM	0.47MF	10%	100V		
				C1407	1-124-910-11	ELECT	47MF	20%	50V		
				C1408	1-124-122-11	ELECT	100MF	20%	50V		
				C1409	1-126-233-11	ELECT	22MF	20%	50V		
				C1410	1-123-875-11	ELECT	10MF	20%	50V		

J1

J1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R226	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1457	1-216-025-00	METAL GLAZE	100 5% 1/10W
R227	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1459	1-216-025-00	METAL GLAZE	100 5% 1/10W
R228	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1460	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R229	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1461	1-216-190-00	METAL GLAZE	470 5% 1/8W
R230	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R1462	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R231	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1463	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R232	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1464	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R233	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1465	1-216-023-00	METAL GLAZE	82 5% 1/10W
R234	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1466	1-216-033-00	METAL GLAZE	220 5% 1/10W
R240	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1467	1-216-025-00	METAL GLAZE	100 5% 1/10W
R241	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R1468	1-216-025-00	METAL GLAZE	100 5% 1/10W
R242	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R1469	1-216-025-00	METAL GLAZE	100 5% 1/10W
R243	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1470	1-216-025-00	METAL GLAZE	100 5% 1/10W
R244	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1471	1-216-023-00	METAL GLAZE	82 5% 1/10W
R245	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1472	1-216-023-00	METAL GLAZE	82 5% 1/10W
R246	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1473	1-216-023-00	METAL GLAZE	82 5% 1/10W
R247	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1474	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R248	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1476	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R249	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R1477	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R250	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1478	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R1401	1-216-023-00	METAL GLAZE	82 5% 1/10W	R1480	1-216-190-00	METAL GLAZE	470 5% 1/8W
R1402	1-216-170-00	METAL GLAZE	68 5% 1/8W	R1482	1-216-178-00	METAL GLAZE	150 5% 1/8W
R1403	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1483	1-216-178-00	METAL GLAZE	150 5% 1/8W
R1404	1-216-178-00	METAL GLAZE	150 5% 1/8W	R1484	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1405	1-249-429-11	CARBON	10K 5% 1/4W	R1485	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1407	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1486	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1408	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1487	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1409	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1488	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1410	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1489	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1411	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1501	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1412	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1502	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R1413	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1503	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R1414	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1504	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R1415	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R1505	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1416	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R1506	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R1417	1-216-023-00	METAL GLAZE	82 5% 1/10W	R1509	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R1418	1-247-738-11	CARBON	82 5% 1/2W F	R1510	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R1422	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1511	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R1423	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R1512	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1424	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R1513	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R1425	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1514	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R1426	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1515	1-216-117-00	METAL GLAZE	680K 5% 1/10W
R1427	1-216-001-00	METAL GLAZE	10 5% 1/10W	R1516	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R1428	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1517	1-216-033-00	METAL GLAZE	220 5% 1/10W
R1429	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1519	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R1430	1-216-170-00	METAL GLAZE	68 5% 1/8W	R1520	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R1431	1-216-041-00	METAL GLAZE	470 5% 1/10W		1-216-111-00	METAL GLAZE	390K 5% 1/10W
R1432	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1521	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W
R1433	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1550	1-216-349-00	METAL OXIDE	1 5% 1W F
R1434	1-249-393-11	CARBON	10 5% 1/4W F	R1556	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R1437	1-249-429-11	CARBON	10K 5% 1/4W				(KV-E2921D ONLY)
R1440	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1521	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W
R1441	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1550	1-216-349-00	METAL OXIDE	1 5% 1W F
R1442	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R1556	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R1443	1-216-089-00	METAL GLAZE	47K 5% 1/10W				(KV-E2921D ONLY)
R1444	1-216-033-00	METAL GLAZE	220 5% 1/10W				(KV-E2921D ONLY)
R1445	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R1521	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W
R1446	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1550	1-216-349-00	METAL OXIDE	1 5% 1W F
R1447	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1556	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R1448	1-216-025-00	METAL GLAZE	100 5% 1/10W				(KV-E2921D ONLY)
R1452	1-216-049-00	METAL GLAZE	1K 5% 1/10W	RV1501	1-238-023-11	RES, ADJ, CARBON	470K
R1453	1-216-049-00	METAL GLAZE	1K 5% 1/10W	RV1502	1-238-016-11	RES, ADJ, CARBON	10K
R1454	1-216-180-00	METAL GLAZE	180 5% 1/8W	RV1503	1-238-017-11	RES, ADJ, CARBON	22K
R1455	1-216-180-00	METAL GLAZE	180 5% 1/8W	RV1504	1-238-012-11	RES, ADJ, CARBON	1K
				RV1505	1-238-023-11	RES, ADJ, CARBON	470K
				RV1506	1-238-017-11	RES, ADJ, CARBON	22K

<VARIABLE RESISTOR>

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

J1 IFG

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
RV1507	1-238-009-11	RES, ADJ, CARBON 220		IC1	8-759-003-90	IC TBA129	
RV1508	1-238-016-11	RES, ADJ, CARBON 10K		IC2	8-759-003-90	IC TBA129	
RV1509	1-238-023-11	RES, ADJ, CARBON 470K		IC3	8-759-030-48	IC TDA6600-2	
*****				IC4	8-759-513-48	IC TDA2595/V9	
A-1654-004-A IFG BOARD, COMPLETE *****				<COIL>			
*1-565-488-11 CONNECTOR, BOARD TO BOARD 12P				L1	1-408-410-00	INDUCTOR	12UH
<CAPACITOR>				L2	1-408-410-00	INDUCTOR	12UH
C1	1-164-232-11	CERAMIC CHIP 0.01MF	50V	L3	1-410-064-11	INDUCTOR	2.7MMH
C2	1-164-232-11	CERAMIC CHIP 0.01MF	50V	L4	1-408-421-00	INDUCTOR	100UH
C3	1-164-232-11	CERAMIC CHIP 0.01MF	50V	L5	1-408-421-00	INDUCTOR	100UH
C4	1-164-232-11	CERAMIC CHIP 0.01MF	50V	<TRANSISTOR>			
C5	1-164-232-11	CERAMIC CHIP 0.01MF	50V	Q2	8-729-901-00	TRANSISTOR DTC124EK	
C6	1-164-232-11	CERAMIC CHIP 0.01MF	50V	Q3	8-729-216-22	TRANSISTOR 2SA1162-G	
C7	1-124-791-11	ELECT 1MF	20%	Q4	8-729-901-00	TRANSISTOR DTC124EK	
C8	1-123-875-11	ELECT 10MF	20%	<RESISTOR>			
C9	1-130-471-00	MYLAR 0.001MF	5%	R5	1-216-045-00	METAL GLAZE	0 5% 1/8W
C10	1-163-121-00	CERAMIC CHIP 150PF	5%	JR8	1-216-296-00	METAL GLAZE	0 5% 1/8W
C11	1-163-119-00	CERAMIC CHIP 120PF	5%	JR10	1-216-296-00	METAL GLAZE	0 5% 1/8W
C12	1-136-298-00	FILM 0.0033MF	2%	R1	1-216-045-00	METAL GLAZE	680 5% 1/10W
C13	1-124-477-11	ELECT 47MF	20%	R2	1-216-043-00	METAL GLAZE	560 5% 1/10W
C14	1-124-477-11	ELECT 47MF	20%	R3	1-216-043-00	METAL GLAZE	560 5% 1/10W
C15	1-124-477-11	ELECT 47MF	20%	R5	1-216-045-00	METAL GLAZE	680 5% 1/10W
C16	1-124-477-11	ELECT 47MF	20%	R6	1-216-043-00	METAL GLAZE	560 5% 1/10W
C17	1-123-875-11	ELECT 10MF	20%	R7	1-216-043-00	METAL GLAZE	560 5% 1/10W
C18	1-137-047-11	FILM 0.01MF	10%	R9	1-216-073-00	METAL GLAZE	10K 5% 1/10W
C19	1-137-047-11	FILM 0.01MF	10%	R11	1-216-095-00	METAL GLAZE	82K 5% 1/10W
C20	1-126-233-11	ELECT 22MF	20%	R12	1-216-097-00	METAL GLAZE	100K 5% 1/10W
C21	1-126-233-11	ELECT 22MF	20%	R13	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
C22	1-137-098-11	FILM 0.1MF	10%	R15	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
C23	1-137-031-11	FILM 0.22MF	10%	R16	1-216-097-00	METAL GLAZE	100K 5% 1/10W
C24	1-124-034-51	ELECT 33MF	20%	R17	1-216-097-00	METAL GLAZE	100K 5% 1/10W
C25	1-137-102-11	FILM 0.022MF	10%	R18	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
C26	1-137-094-11	FILM 0.047MF	10%	R19	1-216-097-00	METAL GLAZE	100K 5% 1/10W
C27	1-124-791-11	ELECT 1MF	20%	R20	1-216-075-00	METAL GLAZE	12K 5% 1/10W
C28	1-163-109-00	CERAMIC CHIP 47PF	5%	R22	1-216-099-00	METAL GLAZE	120K 5% 1/10W
C29	1-124-791-11	ELECT 1MF	20%	R24	1-216-089-00	METAL GLAZE	47K 5% 1/10W
C30	1-124-791-11	ELECT 1MF	20%	R25	1-216-077-00	METAL GLAZE	15K 5% 1/10W
C31	1-137-047-11	FILM 0.01MF	10%	<VARIABLE RESISTOR>			
C32	1-130-479-00	MYLAR 0.0047MF	5%	RV1	1-238-016-11	RES, ADJ, CARBON 10K	
C33	1-163-081-00	CERAMIC CHIP 0.22MF	25V	RV2	1-238-019-11	RES, ADJ, CARBON 47K	
C34	1-137-031-11	FILM 0.22MF	10%	*****			
C35	1-123-875-11	ELECT 10MF	20%	MISCELLANEOUS			
C36	1-163-119-00	CERAMIC CHIP 120PF	5%	A-1-460-091-11	COIL, DEGAUSS (KV-E2521D ONLY)		
C37	1-124-477-11	ELECT 47MF	20%	A-1-426-398-11	COIL, DEMAGNETIZATION (KV-E2921D ONLY)		
C38	1-124-477-11	ELECT 47MF	20%	A-1-451-311-21	DEFLECTION YOKE (Y25FXA) (KV-E2521D ONLY)		
C39	1-163-197-00	CERAMIC CHIP 470PF	5%	A-1-451-313-21	DEFLECTION YOKE (Y29FXA) (KV-E2921D ONLY)		
<FILTER>				1-452-032-00	MAGNET, DISK; 10MM Ø		
CDA1	1-404-751-11	DISCRIMINATOR, CERAMIC		A-1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø		
CDA2	1-404-750-11	DISCRIMINATOR, CERAMIC		A-1-452-509-42	NECK ASSY, PICTURE TUBE (NA-308) (KV-E2921D ONLY)		
SFT1	1-527-840-00	FILTER, CERAMIC		A-1-590-501-11	CORD, POWER(WITH NOISE FILTER)		
SFT2	1-527-839-00	FILTER, CERAMIC		V901	A-8-733-224-05	PICTURE TUBE (A59JWC60X) (KV-E2521D ONLY)	
<DIODE>				A-8-733-824-05	PICTURE TUBE (A68JYK60X) (KV-E2921D ONLY)		
D3	8-719-400-18	DIODE MA152WK		*****			
<IC>				*****			

ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
*A-1678-001-A	BOX ASSY, WOOFER	
*A-1678-010-A	BOX ASSY (RIGHT), SPEAKER (KV-E2521D ONLY)	
*A-1678-003-A	BOX ASSY (RIGHT), SPEAKER (KV-E2921D ONLY)	
*A-1678-012-A	BOX ASSY (LEFT), SPEAKER (KV-E2521D ONLY)	
*A-1678-005-A	BOX ASSY (LEFT), SPEAKER (KV-E2921D ONLY)	
*3-704-280-01	BAG (STANDARD), PROTECTION (KV-E2521D ONLY)	
*3-704-283-01	BAG (STANDARD), PROTECTION (KV-E2921D ONLY)	
4-200-591-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/FRENCH/ DUTCH/ITALIAN/PORTUGUESE)	
*4-201-015-02	INDIVIDUAL CARTON (KV-E2521D ONLY)	
*4-200-036-01	INDIVIDUAL CARTON (KV-E2921D ONLY)	
*4-201-012-02	CUSHION (UPPER) (ASSY) (KV-E2521D ONLY)	
*4-200-041-02	CUSHION (UPPER) (ASSY) (KV-E2921D ONLY)	
*4-201-013-01	CUSHION (LOWER) (ASSY) (KV-E2521D ONLY)	
*4-200-042-01	CUSHION (LOWER) (ASSY) (KV-E2921D ONLY)	
*4-380-340-01	BAG, PROTECTION (KV-E2521D ONLY)	
*4-384-027-01	BAG, PROTECTION (KV-E2921D ONLY)	

REMOTE COMMANDER

1-465-797-11 COMMANDER, REMOTE (RM-817)
4-031-670-11 COVER, POCKET (FOR RM-817)